

EXECUTIVE SUMMARY

The eleven chapters of this comprehensive plan provide a written and graphic description and analysis of current conditions, resources, and capabilities throughout Anthony, Derry, Liberty, Limestone and West Hemlock Townships in Montour County. In addition, the Plan presents future growth policies, recommendations and strategies to address identified concerns and manage the municipalities' assets for the future. The document's intent is to provide for future growth in the Planning Area in such a way that will preserve the Area's rural, agricultural character and quality of life. The Northern Montour Regional Planning Commission, at the direction of the Boards of Supervisors of Anthony, Derry, Liberty, Limestone and West Hemlock Townships, was assigned the primary responsibility for development of the Plan. In June of 1992 a Professional Planning Consultant (Landplan, Inc.) was selected to assist the Planning Commission with the project. Work began in August of that year and has culminated with the development of this document. During the process, a Public Opinion Survey was distributed to all property owners residing in the five Study Area municipalities to solicit their input on various aspects of the Plan.

The various elements of the Plan are interrelated from beginning to end. The background chapters (1-9) present and evaluate available resources and land use activities in the Planning Area; the goals (Chapter 10) set forth the municipalities' desires regarding the type, location, and intensity of future development of the Area; the objective statements (following each goal in Chapter 10) describe the intent or purpose of each goal; and the recommendations (also in Chapter 10) illustrate specific ways in which the goals may be achieved. Chapter 11 identifies specific strategies which could be used to implement the recommendations and a timetable for their activation. In other words, the goal statements represent "what" Township officials would like to see accomplished in the community in the future; the objectives explain "why" each goal is important; the recommendations, "how" each goal might be accomplished; and the implementation strategies, "when" the recommendations should be addressed.

The following paragraphs provide additional detail regarding each of the chapters of this Plan.

Chapter 1 provides an overview of the planning process. The purpose of comprehensive planning, as well as its benefits for the Planning Area are presented. The importance of public input in the process and the legal status and authority of such Plans are also explained. In general, although the Plan provides a basis for the.....

CHAPTER 1.

INTRODUCTION

Early in 1992, five (5) of the eight (8) member-municipalities in the Montour County Council of Governments (COG) decided to undertake the development of a Joint Municipal Comprehensive Plan for the purpose of guiding future growth and development within their areas. The Northern Montour Regional Planning Commission was then established by the five municipalities and was assigned the primary responsibilities for preparation of the Plan. The Commission's overall intent, through planning, is to ensure that future development within their borders is managed so that it is environmentally, aesthetically and economically acceptable. The five (5) municipalities participating in the preparation of this Joint Municipal Comprehensive Plan are Anthony, Derry, Liberty, Limestone, and West Hemlock Townships.

This chapter of the Comprehensive Plan provides an overview of the purposes and authority of comprehensive planning, as well as an explanation of the comprehensive planning process and the legal authority of adopted Comprehensive Plans.

A. WHAT IS A COMPREHENSIVE PLAN ?

A Comprehensive Plan is an official public document adopted by the local governing body as a policy guide to decisions regarding the physical development of the community or region in the next 10 to 15 years. (In this case, the governing bodies of each of the municipalities included in the Planning Area will need to adopt the Joint Municipal Plan upon its completion.) In other words, it is a tool or mechanism in which a municipality or group of municipalities identify their goals and objectives for the future and establish practical strategies to achieve those goals. Such a Plan provides a framework or foundation upon which municipal decisions relating to land use, housing, transportation, and community facilities and utilities and other land use-related issues can be based.

Planning can be defined as an orderly process or activity by which a community or group of communities attempt to deal with their present problems and situations, then provide for their future needs. Planning ahead is important, especially in rural areas, like Anthony, Derry, Liberty, Limestone and West Hemlock Townships, where resources are limited. Without a Comprehensive Plan, the forces of the market place will likely determine what sort of development takes place rather than community and regional needs or any sense of what the residents of the area want to protect or preserve. Conscientious comprehensive planning can help preserve communities that reflect the values and desires of their citizens.

B. PURPOSE OF A COMPREHENSIVE PLAN

The purpose of a Comprehensive Plan is to provide guidance for future actions of an in the municipalities. A Plan solves nothing by itself, but planning can help prevent problems from occurring, because once the damage from unplanned development is done, it is often difficult and costly to correct. There are several important reasons to plan for future growth and development, including:

- Planning can help control change. Change is inevitable, but local planning efforts can play a big role in ensuring such change is guided in a positive direction.
- Planning can guide and coordinate growth and development by: helping to encourage the wise use of land and natural resources; ensuring the preservation of the best possible environment; anticipating future growth needs; and assuring acceptable future development and development patterns through the preparation of reasonable land use control regulations.
- Planning can lead to improved governmental process and functioning by coordinating the activities of numerous municipal agencies, helping to avoid unnecessary delays and redundant spending, and simplifying decision-making activities in various subject areas.
- Planning can help communities meet their present and future financial obligations and can improve their chances for receiving state and/or federal project funding. Funding priorities are often given to municipalities that have anticipated their local needs and established local priorities through the preparation of a Comprehensive Plan. And, in many instances, preferential consideration is given to multi-municipal applications.
- Planning provides an opportunity for elected and non-elected citizens of a community to shape the future of their municipality or region.

When combined with zoning and subdivision regulations, a Comprehensive Plan can manage, control and guide growth and development, while providing protection for special areas or historic places and community resources, by directing growth to the best suited or most appropriate locations. Everyone will benefit from better managed development. Residents will enjoy more convenient, efficient neighborhoods, a high quality natural environment, less congestion and, as a result, lower taxes in many instances. Business people will enjoy more predictability knowing that their investments are located in appreciating markets. And, developers will face less uncertainty, incur lower development costs and have the assurance that the environments around their developments will continue to be of high quality.

Although the basic power over land use is provided through zoning regulations and the design and layout of development is governed by subdivision regulations, good planning is necessary to provide the rationale and vision to sustain such ordinances and to assure necessary state agency approvals and receive favorable funding consideration. The development of a thorough Comprehensive Plan provides an opportunity for a community or area to broaden its focus and look at the impact of each decision on the entire region rather than just the immediate affected site.

C. AUTHORITY FOR COMPREHENSIVE PLANNING

The legal authority to undertake the preparation of a Comprehensive Plan, a municipal Zoning Ordinance and/or a local Subdivision and Land Development Ordinance is provided through the PA Municipalities Planning Code (Act 247 of 1969, as amended by Act 170 of 1988). This legislation sets forth an outline of what is required in such a Plan or Ordinance and how each document should be developed. The primary intent, purpose and scope of the Planning Code is to...

“protect and promote safety, health, and morals; to accomplish coordinated development; to provide for the general welfare by guiding and protecting amenity, convenience, future governmental, economic, practical, and social and cultural facilities, development and growth, as well as the improvement of governmental processes and functions; to guide uses of land and structures, type and location of streets, public grounds and other facilities; to promote the conservation of energy through the use of planning practices and to promote the effective utilization of renewable energy sources; and to permit municipalities to minimize such problems as may presently exist or which may be foreseen.”

Within this context, Comprehensive Plans, Zoning Ordinances and Subdivision Ordinances have been prepared and adopted by many of the State’s municipalities.

In 1972, the Montour County Commissioners adopted a Comprehensive Plan for Montour County and they amended the County Zoning Ordinance, originally enacted in 1968, at the same time. In 1973, the enacted a County-wide Subdivision and Land Development Ordinance. Both the Zoning and Subdivision Ordinances have jurisdiction in all municipalities of the County where local subdivision and zoning regulations are not in effect. (Only three of the County’s municipalities have enacted local land use control regulations, thus development in the remaining eight municipalities is governed by the county’s regulations.) Adoption of the Subdivision and Zoning Ordinances was one way to achieve implementation of the recommendations contained in the County Comprehensive Plan. (The County’s Subdivision Ordinance has recently undergone major revisions and revised regulations became effective on January 1, 1993.)

Although the County has adopted a Comprehensive Plan addressing future growth within Montour County, the mere existence of this Plan does not prevent the Northern Montour Regional Planning Commission from preparing its own, more specific, Joint Municipal Comprehensive Plan. In fact, local planning efforts are strongly encouraged by the State Planning Code, and are mandatory prior to the enactment of a Joint Municipal Zoning Ordinance.

As noted above, a Comprehensive Plan, if developed, must be based on the guidelines established in the Municipalities Planning Code. Such a Plan must contain the following basic elements:

1. A statement of community development goals and objectives;
2. A plan for land use, including provisions for the amount, intensity, character and timing of land use, and the preservation of special areas and types of land uses;
3. A plan to meet the housing needs of present residents and the accommodation of anticipated future residents;
4. A plan for the movement of people and goods;
5. A plan for community facilities and utilities;
6. A statement of the interrelationships among the various plan components;
7. A discussion of short and long term implementation strategies and their budgetary impact; and,
8. A statement indicating the relationship of existing and proposed development of each municipality to the region.

Once enacted, municipalities must use their Plan in order for their recommendations to be accomplished. The document should not however be considered as inflexible or unchangeable. Conditions and directions do change over time in many cases, and each community should review the document every few years to determine if it needs revised or adjusted to reflect new or previously unforeseen circumstances or focuses. In this case, the entire document should be reviewed periodically by the Joint Municipal Planning Commission and it should be updated, as appropriate, where change occurs.

D. COMPREHENSIVE PLANNING PROCESS

The first step in the comprehensive planning process is to objectively analyze the municipalities from a number of perspectives. A thorough review of existing conditions, facilities, services, and similar features is essential before preparing the Comprehensive Plan. Existing concerns, issues and problems must be identified and suitability's for and limitations to development determined. Fragile and special resource or environmentally sensitive areas must be located, including steep slopes, floodplains, wetlands, poor soils, prime farm lands, etc. These features must then be mapped so they can be considered during the development of the Plan's land use policies and implementing regulations, i.e. Subdivision and/or Zoning Ordinances.

Growth pressures must also be identified and addressed and a response incorporated into the Plan's land use recommendations. The land use objectives must also consider the area's environmental limits to development, as well as the future growth desires of citizens of each Township.

A specific set of goals and objectives aimed at guiding future development must then be developed, and recommendations intended to achieve the desired results must be determined. Ultimately, the recommendations need to be molded into an implementation strategy which will set forth a schedule for both short and long term achievement of the identified goals.

Citizen input and participation should be encouraged throughout the comprehensive planning process. Good planning involves citizens, not just planners and officials, and considers their opinions as valuable input. In an attempt to obtain input from the citizens of the Planning Area, the Northern Montour Regional Planning Commission distributed a Public Opinion Survey to all locally-based property owners in the five Study Area municipalities. (A copy of the Survey and its results can be found in Appendix A of this document.)

E. LEGAL STATUS OF COMPREHENSIVE PLANS

While a Comprehensive Plan is not an Ordinance and its individual policy statements and recommendations can not be enforced as regulations, the Municipalities Planning Code does require, after the adoption of such a Plan, that a municipal planning agency review be requested by the governing body (Township Supervisors) before they take any action on certain types of activities. Each of the following proposed actions must be reviewed by the appropriate municipal Planning Commission (and in some cases, the Regional Planning Commission) to determine its consistency with the objectives of the Joint Municipal Comprehensive Plan.

1. the location, opening, vacation, extension, widening, narrowing or enlargement of any street, public ground, pierhead or watercourse;

2. the location, erection, demolition, removal or sale of any public structure located within the municipalities;
3. the adoption, amendment or repeal of an official map, subdivision and land development ordinance, zoning ordinance or provisions for planned residential development, or capital improvements program; or
4. the construction, extension or abandonment of any water line, sewer line or sewage treatment facility.

Despite this mandated review requirement, the Planning Code also provides that an action taken by a municipal governing body can not be declared invalid “on the basis that such action is inconsistent with, or fails to comply with, the provisions of the Comprehensive Plan”.

CHAPTER 2.

MUNICIPAL HISTORY AND GENERAL BACKGROUND

To be able to fully understand and appreciate the municipalities today and to help them plan for their future, it is first necessary to know about the area's past and the heritage that it offers. A complete history of Montour County and its many facets can be found in "A History of Montour County, Pennsylvania", compiled by Mr. Fred W. Diehl, published by the Thomas Beaver Library, Danville, PA, in 1969. Paraphrased excerpts from this publication are presented here to provide a brief historical perspective of the area's past.

A. HISTORY OF MONTOUR COUNTY

Anthony, Derry, Liberty, Limestone and West Hemlock Townships all lie within Montour County, which was part of Northumberland County in the late 18th century. When Northumberland County was mapped out in 1772 it encompassed 26 present day counties in north-central Pennsylvania and extended as far north as the New York State line. At that time, today's Montour County was included within the boundaries of an area known as Turbot Township in Northumberland County, which was named for an early land speculator named Turbot Francis.

The 1770's were a period filled with conflict in this part of the country. Connecticut and Penn settlers had conflicting claims to the Pennsylvania territory which were compounded by the Penn settlers' support of the Tories and the Connecticut settlers support of the Rebels during the Revolutionary War. In addition, Indians attacked both groups of settlers regularly. During this period a series of forts were established in this region. Only Fort Rice, constructed during the Indian conflicts of the 1770's survives today. It was built near the head waters of the Chillisquaque Creek in Northumberland County. This three story stone structure contained a spring in the basement which was reported to be the source of Muddy Run. Although not in Montour County—it is located south of Route 54, halfway between Turbotville and Washingtonville – it was an important structure for early settlers during the 1770's when Indian conflicts were common.

Disagreements continued to arise between settlers in this area after the end of the Revolutionary War. The formation of Montour County as a separate entity was not without controversy. It took 37 years of political fighting to finalize the boundaries of the County and the location of the County's Seat in Danville. The controversy centered on competition between Danville and Bloomsburg for location of the County Seat for Columbia County. When Columbia County was carved out of Northumberland County in 1813, its western boundary was the West Branch of the Susquehanna River. (Initially, Columbia County included all of Montour County.) After these boundaries for Columbia County were established, town leaders in Milton, Danville and Bloomsburg vied for the location of the Columbia County seat.

Danville was selected because of its numerous hotels and central location. However, just two years after Danville's selection as the County seat in 1813, the State Assembly returned a large area of the western part of Columbia County to Northumberland County. The Assembly's actions triggered the events leading to the formation of Montour County.

The area returned to Northumberland Count included the territory of present day Limestone and Liberty Townships. Immediately, Bloomsburg supporters challenged the status of Danville as County Seat. They lobbied hard for removal of the Columbia County seat to their town because Danville was no longer a central location within the boundaries of the reconfigured Columbia County. The fight between Danville and Bloomsburg for location of the County Seat continued on an off until the issue was put to a vote in 1845. At that time, the County residents voted by a large margin to move the County Seat from Danville to Bloomsburg. In response to this loss, Danville's residents and partisans straightaway began a movement to divide Columbia County into two Counties, with Danville as the County seat for the new County. In 1850, Danville partisans sent Valentine Best, publisher and editor of "The Danville Intelligencer" to the State Senate. Although he was a Democrat, he effectively negotiated with the Whigs (the opposing political party at the time) to redistrict and form two counties from Columbia County. Best's bill passed by one vote, and in 1850 Governor Johnson signed a bill establishing Montour County. Initially Montour County included all of the Townships of Franklin, Mahoning, Valley, Liberty, Limestone, Anthony and Derry, the Boroughs of Danville and Washingtonville, and part of the Townships of Montour, Hemlock, Madison and Roaring Creek. Danville was named County Seat of the new County with the condition that the town donate the Court House and Jail to the new County.

As is evident today, the new County did not survive intact and just a few years later, in 1853, Roaring Creek and parts of Franklin, Madison, and West Hemlock Townships were returned to Columbia County. The remaining portion of Franklin Township we renamed Mayberry Township (in honor of pioneer resident Mayberry Gerhart) and was permitted to remain part of Montour County because of its proximity to the County Seat in Danville. Mayberry Township is the only part of Montour County that lies on the south side of the Susquehanna River.

Montour County was named for Madam Montour. Madame Montour was also the namesake for Montour Ridge, Montour Township in Columbia County and for Montoursville, in Lycoming County. Madame Montour and her son Andrew were legendary among the early white settlers in the region. She was the product of a marriage between a French gentleman named Montour and an Indian woman. She was born in the late 1600's and died between 1745 and 1752. Madame Montour assisted the English settlers as an interpreter and intermediary with the local Indians. She was loyal to the English, despite her French heritage, because her brother was murdered by order of the French Governor of Canada in 1709. Madame Montour had two marriages, first with an Indian of the Seneca tribe and secondly with an Indian of the Oneida tribe. Her son Andrew, the best known of her

six children, also served as an interpreter. Madame Montour and her son both spoke French, English and several Indian languages. Her name was deemed fitting for Pennsylvania's 64th County.

The majority of the townships and communities of Montour County were formed and named while Montour County was still part of Columbia County. The exceptions were Cooper, Mayberry and West Hemlock Townships which were established after Montour County was created. Brief histories of the formation of Anthony, Derry, Liberty, Limestone and West Hemlock Townships and an overview of some of the more recent history in the region follow.

B. HISTORY OF THE TOWNSHIPS

1. Anthony Township

Anthony Township's early residents were primarily farmers, as were most of the first settlers in this region. Gradually several small communities where formed as the number of European settlers increased.

John Fruit, a native of Ireland, was the first white settler in the area now known as White Hall. He established a country store in the area which attracted additional settlers. Their settlement became known as Fruitstown. In 1810, Mr. Fruit sold his business to John Frederick Derr and Mr. Derr sold the business to his nephew, William McBride, several years later. In 1820, Fruitstown established its first post office. John Frederick Derr was the first postmaster and, like his general store, his successor as postmaster was his nephew, William McBride. Fruitstown Village grew and prospered as a trading post for livestock, lumber and trading products. The Red Horse Hotel, one of the earliest rural hotels in the area, served local travelers.

Frederick Ritter was attracted to Fruitstown from Berks County. He arrived in 1818 and built a hotel in the community. This hotel was eventually reconstructed with an elaborate archeitecutal façade and interior designed by Samuel Brugler. Samuel's brother John, of Danville, was a well known architect of the time. The hotel displayed a great many hand carvings, including a large American Eagle. It was three stories high and painted white. It became known as the White Hall Hotel and was a popular spot on the stage coach route. The Village itself became known as White Hall by 1850 when Montour County was formed. In 1850, White Hall included a general store, blacksmith shop, shoemaker shop, tailor shop, dressmaker and millinery shop, harness shop and a shingle mill. The White Hall Hotel operated until the early 1900's.

The Village of Exchange, which lies nearly at the center of Anthony Township, was permanently named in 1849 when the first post office was organized in the community. Exchange was named for its trading activity and

location as a community gathering place. It was the location of several early hotels. The best known was the Exchange Hotel which was opened in 1840 by John Bull. It remained in operation until the 1920's. Exchange was the home of the first Grange in Montour County. It was organized in 1874 and the first Grange Hall was constructed in 1897.

The hill-top area in northern Anthony Township was named McKee's Heights for a well-known early family. Comly was another early community in the Township. Comly was settled in the east-central part of Anthony Township.

The Old Derry Church was organized in 1792, also in the east-central part of the Township. The original landmark church was torn down and rebuilt in 1846. When constructed the church lay within Derry Township, which provided its name. In 1849 however, when Derry Township was divided and Anthony Township was founded, the old Derry Church "wound up" in Anthony Township.

Anthony Township had eight one-room school houses in the 19th century. They were at White Hall, Exchange, Cross Roads, Hurley, Glen, Derry, Reifsnyder and Watts. By 1941, these schools were all closed.

Anthony Township was formed in 1849 from Derry Township. It was named for Judge Joseph B. Anthony who was President Judge of Columbia County at the time. Early farming families settling in the Township in the 18th century included the Clarks, Dyers, Ritters, Fruits, McBrides, Dildines, Schooleys, Johnstons and Craigs. Some of these names are still found in the community today.

2. Derry Township

Derry Township was formed out of Turbot Township in 1786 and was originally much larger than it is today. Madison Township in Columbia County was carved out in 1817, and a part of Valley Township, in Montour County, was removed in 1839. In 1849, Anthony Township was created from what was once Derry Township. Derry is believed to be a family name, but the family record did not survive.

Derry Township, like Anthony, was settled by farmers. One of the earliest recorded settlers was a man named Brittain. In the early 1790's, a man named Jacob Shultz also came to Derry Township. He originally came from Limestoneville and was one of the first people buried in the old Derry Church Cemetery when he died in 1804.

In 1777, Fort Bosley stood between the Chillisquaque Creek and the east bank of the North Branch of the Susquehanna River, near the southern

entrance to Washingtonville. The fort was originally a mill. When the Indians were disturbed, the fort was garrisoned by 20 men. After 1780 it was no longer used and it does not survive today.

The Village of Strawberry Ridge in Derry Township was situated approximately two miles north of Washingtonville. It was named for the abundance of wild strawberries in the area. Snyder's store was the center of activity in this area in the 19th century. The Zion Church was built in 1818 in the village for a union of Lutheran and Reformed faiths. The faiths separated again though in 1850, and the Lutherans build a church in Washingtonville.

In 1812 two early settlers, John Steinman and John Auten, established a water-powered saw mill operation in Derry Township. Later Mr. Auten added a grist mill operation.

Six one-room school houses operated in Derry Township in the 19th century. In 1908, a high school was opened in Strawberry Ridge. This two year high school operated until 1914.

At the turn of the century, Billmeyer's Park, located just east of Washingtonville, attracted many visitors. The twenty-five acre woodland park was a privately held game preserve created by Alexander Billmeyer.

The Pennsylvania Power and Light Company (PP&L) began construction of their Montour Power Plant in 1986 in Derry Township, between Strawberry Ridge and Washingtonville. The actual plant construction occupied approximately 1,000 acres. At about the same time though, PP&L purchased an additional 2,800 acres north of the plant site in Anthony Township including Lake Chillisquaque, to serve as a wildlife preserve and recreation area for Montour County residents.

3. Liberty Township

Liberty Township was carved out of Columbia County in 1816. Like all of Montour County, Liberty Township was part of Turbot Township in Northumberland County prior to 1813.

Colonel Thomas Strawbridge was an early settler from Chester County. He settled with his wife, Margaret, who was General William Montgomery's sister. The Colonel was a veteran of the Revolutionary war known for his bravery. He started the first tannery to serve hunters and trappers in this part of the state.

The McWilliams were other early settlers. Robert McWilliams' granddaughter, Jane Curry, was the first white child born in the area lying between the North and West Branches of the Susquehanna River. Other

early settlers included the Billmyers, Wilson, Wagner, McMahan, and Simington families.

Stephan Moore, the grandson of John Moore, who came to America in 1682 with William Penn, built the first home in the area now called Mooresburg. Christopher Latham Shoales, the inventor of the typewriter, was born in 1819 near Mooresburg. He spent his early childhood there and began to develop his typewriter while working for the newspaper in Danville. John Ack operated Mooresburg Pottery near Moorsburg until 1901. The jugs, crocks and vases produced by Ack are now highly collectable. Mooresburg had a hotel prior to 1920. Like the rural hotels in White Hall, Exchange and Limestoneville, it closed when automobiles became the common mode of transportation.

Two churches were built in Mooresburg in the 1830's; the Mooresburg Presbyterian Church in 1834 and the Mooresburg Methodist Church in 1834. Both churches have since been replaced with newer buildings.

Another rural church was built near the center of the Township at approximately the same time. It was of the Lutheran denomination and was called the Oak Grove Church. After school consolidation, the Church took over the Oak Grove one-room school house and used the building for social and storage purposes.

A small settlement, known as Mexico, was founded in Liberty Township in the 19th century. Mexico lies midway between Washingtonville and Pottsgrove along the highway close to the Liberty and Limestone Township border. A Methodist Church, called the Mexico Church, was located in the village in the 19th century.

The old Chillisquaque Cemetery, located near the northwestern corner of the Township, contains the unmarked graves of numerous Indians, and graves of Indian raid victims and Revolutionary War soldiers. A log-built Presbyterian Church stood on this site in the early 1800's. It has since been torn down, but the cemetery remains a site of historic interest in the Township.

The two remaining covered bridges in Montour County (one of which is shared with Northumberland County) were built in Liberty Township. Both bridges cross Chillisquaque Creek. The Keefer Bridge, on Township Route 346, west of Pa Route 54, was built in 1853 for a cost of \$498.00. The construction was financed by William Butler, but the bridge was apparently named for builder George W. Keefer. The Sam Wagner Bridge was built around 1881. This 78 foot Burr Truss Bridge crosses Chillisquaque Creek on the Mexico Road (now SR 3013) at the Northumberland County and Liberty Township Line. Both bridges are historically significant.

Liberty Township was home to several early manufacturing operations including Mooresburg Pottery established in 1857 and mentioned previously; Moses Stecker's "Stecker" rocking chair homeshop; and a charcoal iron smelting furnace built in 1839. Mooresburg Pottery continued operations until 1901, while Stecker rocker production was more limited. By 1841, Liberty's iron smelting operation was producing 28 tons of iron per week. The operation was leased to James and William Trego and then the Maus brothers before production was suspended in 1850 when the Danville furnaces were completed.

Eight one-room schools operated at one time in Liberty Township. They were Madden, Chestnut Grove, Pine Grove, Jackson, Center, Oak Grove, Mexico and Mooresburg. Today, the Mooresburg School houses the Montour County Historical Society's "Mooresburg One Room School Museum." They have an open house the first Sunday in October every year.

4. Limestone Township

Limestone Township, like all of Montour County, was originally included in Turbot Township, Northumberland County. The western boundary of Limestone Township was finalized when the borders of Columbia County were fixed in 1816. The wealth of limestone in the area gave the Township its name and contributed to its fertile soils. Several limestone kilns were in operation during the late 19th century and the limestone was used for iron ore manufacture in Danville.

The efforts of Daniel Smack led to the establishment of Limestoneville in 1835. He was an ambitious man and he organized a blacksmith shop, tailor shop and shoemaker shop. The town was also the site of an early rural hotel. Once the town was established, Mr. Smack directed the building of a Methodist Church and the organization of a congregation. The church he built did not however continue into the 20th century. Limestoneville was also the site of a private fee school, the Limestone Institute, which operated from 1862 until 1899.

Limestoneville had one of the earliest steam saw mill operations. It was built by Ellis Cromley in 1888. A broom factory operated in Limestoneville less than 20 years later.

John Schaler established a chop mill a few miles north of Limestoneville in the village of Schuyler. An expanded operation, including a large grain and storage mill was later taken over by J. N. Herr.

In addition to Limestoneville and Schuyler, Ottawa and California were two small Limestone Township communities settled in the 19th century.

Ottawa had a post office and a SB&B Railroad stop. The residents of the Village of California organized the California Grange in 1890 and the Grange Hall was built in 1892.

Six one-room school houses operated in Limestone Township. These schools, Limestone, Limestone Run, Fairview, California, Snyder and Boyer, operated until 1932.

5. West Hemlock Township

West Hemlock Township was formed in 1853 when the eastern boundaries of Montour County were finally established. The name originates from Hemlock Creek, which was given its name because of an extensive hemlock growth in the area. West Hemlock Township was formed out of adjoining Hemlock Township in Columbia County, hence the name West Hemlock.

The early settlers in West Hemlock Township included families named Crossley, Sandel, Arnwine, Moore, Deighmiller, Styer and Crim. Some of these family names are still found in the Township.

The New Columbia Church and Cemetery are the main points of historic interest in West Hemlock Township. The church, which was originally called St. Peter's, was built of logs in 1832 and later reconstructed with brick in 1870. The church cemetery includes the graves of Revolutionary and Civil War soldiers, as well as soldiers from the Mexican War and both World Wars. The Village of New Columbia was originally called Swenoda when its post office was established in 1895.

Three one-room school houses operated in West Hemlock Township prior to school consolidation. They were Sheep, in the north-central part of the Township; the Moore School, on the eastern end of the Township; and the Styer School located in the northern portion of West Hemlock Township, on the Styer Farm.

C. RECENT HISTORY OF THE REGION

The early 20th century was a period of industrial growth in the Danville area of Montour County. Danville attracted a large variety of industries. Some of the earlier ones were Danville Art Bronze and Iron Works, Inc. organized in 1922; the Kennedy Van Saun Corporation, formerly the Danville Foundry of 1906; and Thompson Products, Inc., which became TRW, Inc. Two large medical institutions were established in the County prior to 1916. They were the Danville State Hospital and the Geisinger Medical Center, both in Mahoning Township. The state hospital's first

building was completed in 1872 and the first Geisinger buildings were finished in 1915.

In 1968, construction began on Pennsylvania Power and Light's Montour Plant in Derry Township. The plant's two bituminous coal burning units were completed in 1972. The 2800 acre parcel of land for the Montour Preserve was purchased concurrently with construction of the plant. (A more thorough discussion of major employers is included in Chapter 4 of this Plan.)

The first 50 years of the 20th century saw two World Wars which impacted the region. Montour County lost 24 men of 629 men and 15 women it sent to serve in World War I. The County suffered greater losses during World War II. Total deaths were 51 or 1,445 men and women sent to serve. Beer's "History of Columbia and Montour Counties" and Diehl's "History of Montour County" offer lists of names and greater details about County residents' service in the World Wars and previous wars.

Domestic issues were not neglected during the war years. The formation of the "Home and School League" in 1920 was the first step leading to the consolidation of the student population into large districts and the elimination of the one-room school houses in Anthony, Derry, Liberty, Limestone, and West Hemlock Townships. During the 1940's, even larger school districts were organized and by the mid-1950's, students from Limestone and Anthony Townships were included in the Warrior Run School District of Northumberland County, while students from Liberty, Derry and West Hemlock Townships were included in the Danville Area School District.

Montour County was the first county in Pennsylvania to form a "County Unit" of school organization in 1953. From 1953 to 1967 five (5) new school buildings were constructed; an Elementary School in Riverside in 1957, the Danville Area Senior High School in 1959, the Danville Junior High in 1961, the Mahoning Consolidated School in 1964, and the Liberty-Valley Elementary School in 1966. The last one-room schools still operating were Mooresburg and Clark in Liberty Township. The closed in 1964.

The completion of Pennsylvania's Interstate Route 80 in the late 1960's/early 1970's was probably the most significant event of recent history in terms of its impact on population growth in Montour County. This route, also called the Keystone Shortway, passes through Liberty, Valley and West Hemlock Townships in Montour County.

Source: A History of Montour County Pennsylvania by Fred W. Diehl, Published by Thomas Beaver Library, Danville, PA, 1969.

D. LOCATION OF TOWNSHIPS IN REGIONAL SETTING

Anthony, Derry, Liberty, Limestone and West Hemlock Townships are situated in the Anthracite Region of Pennsylvania. This seven county region includes Carbon, Columbia, Monroe, Montour, Northumberland, Pike and Schuylkill Counties. It encompasses a land area of 3,412 square miles and was named for the anthracite coal mining and manufacturing operations which were the two principal industries in the district from approximately 1830 to 1900. After the turn of the century anthracite coal mining declined because of the introduction of bituminous coal and coke. Since the drop in anthracite coal mining, manufacturing has assumed a greater role in the region economically. Montour County has fared better economically than some of the other counties in the Anthracite Region because of it was less dependent on mining for employment.

Montour County is located slightly east of the geographic center of the state, in the Appalachian Mountain Range of Pennsylvania, just north of the Montour Ridge. The County contains 131.0 square miles (approximately 83,840 acres) and is bordered by Northumberland County to the south and west, by Lycoming County on the north, and by Columbia County on the east. The Borough of Danville is the County's largest urban area, as well as its County Seat.

Anthony, Derry, Liberty, Limestone, and West Hemlock Townships occupy a total of 90.5 square miles (about 57,920 acres); almost 70% of the County's total land mass. They are contiguous municipalities which occupy all of the County's land area from its northernmost boundaries south to Interstate 80, with the exception of Washingtonville Borough and Valley Township. (See Map 1.)

The configuration of PA Routes 11, 44, 45, 54, 254, and 642 and Interstate Route 80 provide an excellent connection between the manufacturing sectors of this region of Pennsylvania and the more densely populated Northeastern Atlantic coast. This roadway network connects residents of Anthony, Derry, Liberty, Limestone and West Hemlock Townships to a wide array of employment centers. Some of the closest employment centers include Muncy and Williamsport to the northwest and Danville and Bloomsburg to the south and west. Colleges, cultural facilities, and major shopping centers are also readily accessible via the existing road network.

In addition, rail service is provided throughout the region by the North Shore Railroad, which provides freight service for businesses and industries from Northumberland to Berwick, and by Conrail, which also handles industrial freight services, including service to Pennsylvania Power and Light's Montour Plant, just north of Washingtonville.

E. GOVERNMENTAL ORGANIZATION

Anthony, Derry, Liberty, Limestone, and West Hemlock Townships are all Second Class Townships and are therefore subject to the government consists of three (3) Supervisors, elected by the residents of the municipality to serve as the official governing body. In addition, each Township has a municipal secretary, either one of the elected Supervisors or an individual appointed by the Supervisors.

Most of the other government functions and services are provided by Montour County, from its Court House in Danville or its "Woodbine Road Annex", east of Danville, along PA Route 11. The County maintains offices for Voter Registration, Tax Assessment, Planning, Recorder of Deeds, Prothonatary, Treasurer, Sheriff, Agricultural Extension, Conservation District, and the Commissioners. Courtroom space is also provided for court trials, as well as office space for numerous court-related departments.

None of the five (5) townships included in the Planning Area of this study has a municipal police force, nor a paid fire department. They are however, responsible for the maintenance of all Township roads within their jurisdictions.

F. COUNCIL OF GOVERNMENTS FORMATION

The Montour County Council of Governments (COG) was formed on April 24, 1991 by representatives of several township in Montour County. The initial municipalities which joined in the formation of the COG were Valley, West Hemlock, Liberty, Limestone and Anthony Townships. Later in 1991 Derry and Mahoning Townships joined, while in 1992 Danville Borough became a member.

The purpose of the COG is to provide an opportunity for local governments to jointly cooperate in projects involving their various duties and responsibilities. To date, the COG has been involved in obtaining grants to purchase a road and street sign making machine; bulk purchasing of road supplies; sharing of equipment; and preparing this Joint Municipal Comprehensive Plan for Anthony, Derry, Liberty, Limestone, and West Hemlock Townships.

CHAPTER 3.

DEMOGRAPHIC ANALYSIS

A. PAST GROWTH TRENDS

Table 1 illustrates the changes in population from 1950 to 1990 in Anthony, Derry, Liberty, Limestone and West Hemlock Townships compared with growth in the other Townships of Montour County and the County as a whole. Overall, the five Planning Area Townships grew dramatically over this 40 year period. While the County added a total of 1,734 residents between 1950 and 1990, the five Study Area municipalities, added together, gained 1,920 citizens. It is striking that Montour County's total gain in population between 1950 and 1990 was less than the population gained by the Planning Area Townships during the past decade. This reflects an important population shift within the County.

Table 1

**Montour County Municipalities
Population - 1950 to 1990**

	1950	1960	1970	1980	1990
Anthony Township	844	911	1,013	1,197	1,287
Derry Township	663	659	630	1,061	1,290
Liberty Township	834	956	1,070	1,308	1,309
Limestone Township	569	592	602	755	789
West Hemlock Township	274	243	250	365	429
Cooper Township	342	401	545	797	905
Danville Borough	6,994	6,889	6,176	5,239	5,165
Mahoning Township	4,463	4,819	4,593	3,913	4,132
Mayberry Township	141	125	204	197	209
Valley Township	683	937	1,251	1,625	2,010
Washingtonville Borough	194	198	174	218	210
MONTOUR COUNTY	16,001	16,730	16,508	16,675	17,735

Source: U.S. Bureau of Census, Census of Population, Summary of General Population Characteristics, 1950, 1960, 1970, 1980, and 1990.

Table 1 shows that while much of Montour County was gaining residents during this 40 year period, some sections of the County were losing residents. Anthony, Derry, Liberty, Limestone and West Hemlock Townships were among the population gainers in Montour County and posted large increases in residents between 1950 and 1990. While these Townships represented roughly 20% of the population of Montour County in 1950, by 1990 these same five Townships made up nearly 30% of the County's total population.

The Montour County population "losers" during this 40 year period were the more intensely-developed areas of Danville Borough and Mahoning Township. The movement of residents from this sector of Montour County into the less densely-populated Townships during this 40 year period was representative of population shifts across the country. Danville Borough and Mahoning Township's population losses were likely caused by a combination of factors; residents moving to less densely-populated areas, shrinking family sizes, and commercial developments replacing residential land uses. Although Danville's rate of population loss has been slowing during the last 10 years, the Borough's 1990 population of 5,165 is still 25% below its 1950 population of 6,994.

Table 2 shows how dramatically the growth rates in Anthony, Derry Liberty, Limestone, and West Hemlock Townships exceeded the growth rate of the County as a whole during the 1950-1990 period.

Table 2

**Planning Area Townships and Montour County
Percent Change in Population - 1950 to 1990**

	1950- 1960	1960- 1970	1970- 1980	1980- 1990	1950- 1990
Anthony Township	7.94%	11.20%	18.16%	7.52%	52.49%
Derry Township	-0.60%	-4.40%	68.41%	21.58%	94.57%
Liberty Township	14.63%	11.92%	22.24%	0.08%	56.95%
Limestone Township	4.04%	1.69%	25.42%	4.50%	38.66%
West Hemlock Township	-11.31%	2.88%	46.00%	17.53%	56.57%
Planning Area Overall	5.56%	6.07%	31.44%	8.92%	60.30%
MONTOUR COUNTY	4.56%	-1.33%	1.01%	6.36%	10.84%

Source: U.S. Bureau of Census, Census of Population, General Population Characteristics, 1950, 1960, 1970, 1980, and 1990.

As can be seen in Table 2, the Planning Area Townships posted overall large gains in population between 1950 and 1990, but between 1950 and 1970, Derry and West Hemlock Townships actually recorded population losses. Between 1950 and 1960 West Hemlock Township lost a significant portion (over 11%) of its population. Although proportionally large, the actual loss represented only 31 residents, which likely translated to less than 10 families. Likewise Derry Township lost approximately the same amount of population, 33 residents, over the twenty-year period from 1950 to 1970. Again, this loss probably represented less than 10 families. While some of these population losses can be attributed to the long-term decline of the farm population since 1940, a part of the decline in residents in Derry and West Hemlock Townships during this period may reflect an economic link between these Townships and the immediate Danville area. From 1950 to 1970, population changes in Derry and West Hemlock Townships seemed to correspond to population changes in Danville Borough. Some of Derry and West Hemlock Townships' population losses may also reflect jobs lost in the Danville area. This dependence on the employment centers in the Danville area however seems to have ended after the completion of Interstate 80 in the mid 1970's. After the highway was completed, Derry and West Hemlock Townships' populations, unlike Danville's, increased well past their 1950 levels.

Although a significant portion of the growth in Anthony, Derry, Liberty, Limestone and West Hemlock Townships was due to new residents moving in from outside Montour County, much of the growth in these Townships was due to residents relocating to these and other Townships within Montour County from Danville Borough and Mahoning Township. Since World War II it has been common throughout the United States for people to move from more urbanized areas to more rural districts. Increasing automobile ownership and extensive home building beginning in the 1950's helped encourage families to move out of more densely-populated areas into rural or suburban settings. As stated earlier, Montour County's growth pattern and population redistribution seemed to reflect nationwide trends during the 1950-1990 period.

The 10.84% overall growth rate at the County level for the 40 year period cited is less than one third of Limestone Township's 38.7% growth rate during the same period. The growth rates of Anthony, Liberty and West Hemlock Townships were roughly five times the County's growth rate, while Derry Township grew at a rate nearly 9 times the County's rate.

These rapid increases in population combined with the loss of farms countywide have begun to change the landscapes of these Townships. Although the U.S. Census of Agriculture reports that the average size of farms in Montour County has increased from 137.1 acres in 1964 to 155 acres in 1988, the number of

farms in the County has fallen sharply. Only 270 farms were operating in the County in 1988, 35% less than the 416 farms operating just 24 years earlier in 1964.

Although Agriculture Census data was not available by Township, it is known that as many as 56 of the 146 “lost” farms were purchased by Pennsylvania Power and Light for construction of their 1.5 million kilowatt power plant in Anthony and Derry Townships. At least half of the 5,000 acres of farmland purchased by P.P. & L. is still in agricultural use today, while another 1,000 acres of the total land purchased was used to establish the Montour Preserve, an outdoor recreation and nature preserve. Approximately 400-500 acres are used for the plant site and the remaining areas are used for timber production and reforestation programs.

Farms in Liberty, Limestone and West Hemlock Townships have also been subdivided and sold in recent years. Since prime farmland soils cover a significant amount of acreage throughout the Planning Area, the recent losses of farmland to residential development are a concern linked to population growth pressures.

Table 3 illustrates the significant changes in population density within Anthony, Derry, Liberty, Limestone and West Hemlock Townships, as well as the County as a whole, between 1950 and 1990. Although the character of landscape is still overwhelmingly rural in the Planning Area Townships, it is interesting to note how much development has been absorbed over a 40 year period. Since the loss of farmland slowed recently, according to the Agriculture Census, it is unlikely that the next 40 years will see changes as marked as those experienced during this era.

Table 3

Planning Area Townships and Montour County
Population Density - 1950 and 1990

	Land Area	1950	1990
Anthony Township	26.0 sq. miles	32.5 persons per sq. mile	49.5 persons per sq. mile
Derry Township	16.2 sq. miles	40.9 persons per sq. mile	79.6 persons per sq. mile
Liberty Township	27.5 sq. miles	30.3 persons per sq. mile	47.6 persons per sq. mile
Limestone Township	13.2 sq. miles	43.1 persons per sq. mile	59.8 persons per sq. mile
West Hemlock Township	7.6 sq. miles	36.1 persons per sq. mile	56.4 persons per sq. mile

MONTOUR COUNTY	131.0 sq. miles	122.1 persons per sq. mile	135.4 persons per sq. mile
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Source: U.S. Bureau of Census, Summary of General Population Characteristics, 1950 and 1990. Calculations by Landplan, Inc., 1992.

B. CURRENT POPULATION PROFILE

The area's current population profile can be compared with its population characteristics for the past to identify trends and potential problems and opportunities. The 1990 age distribution, sexual composition and racial composition characteristics for Anthony, Derry, Liberty, Limestone and West Hemlock Townships will be reviewed and compared with the same data from 1960. Where statistics at the Township level are not available, such as marital status and education levels, Montour County's 1990 population will be compared with the population of 1960. Characteristics of the population of the State of Pennsylvania will also be generally noted throughout this section as a source for comparison purposes.

Although nationwide demographic trends are often reflected locally, this is not the case with the Planning Area Townships. The population characteristics and profiles differ significantly from the characteristics of the County and state populations taken as a whole.

The residents of Anthony, Derry, Liberty, Limestone, and West Hemlock Townships are younger than the average for Montour County citizens. Table 4 shows that over 30% of the populations of Anthony, Derry, and Limestone Townships, are under 18 years of age, and less than 10% of their residents are over age 65. This is significantly different from the age distribution in Montour County which has fewer residents under the age of 18, 24.4%, and a much higher proportion of elderly residents, 16.5%. Liberty Township's age distribution more closely reflects the age distribution in the County, although again, Liberty has a lower proportion of senior citizens. West Hemlock Township, which of course has less than 3% of Montour County's total population, has a significantly higher proportion of residents in the 18-64 age category and a correspondingly lower proportion of school age and elderly citizens. While the County's age distribution is very close to the age distribution for the State of Pennsylvania - - 23.5% of state residents are under age 18; 61.1% are aged 18-64; and 15.4% are over age 65 - - the Planning Area Townships reflect very different age distributions.

Table 4

**Planning Area Townships and Montour County
Age Distributions - 1960 and 1990**

		<u>Under 18</u>	<u>18-64</u>	<u>Over 65</u>
Anthony Township	1990 (1960)	30.7% (39.7%)	59.8% (52.2%)	9.5% (8.1%)
Derry Township	1990 (1960)	30.6% (37.4%)	60.2% (52.9%)	9.2% (9.7%)
Liberty Township	1990 (1960)	25.5% (41.0%)	61.8% (50.5%)	12.7% (8.5%)
Limestone Township	1990 (1960)	31.3% (40.5%)	58.8% (53.0%)	9.9% (6.5%)
West Hemlock Township	1990 (1960)	26.1% (42.4%)	65.7% (51.1%)	8.2% (6.5%)
MONTOUR COUNTY	1990 (1960)	24.4% (29.4%)	59.1% (57.2%)	16.5% (13.4%)

Source: U.S. Bureau of Census, Census of Population, Summary of General Population Characteristics, 1960 and 1990.

Age distributions are used in planning to predict future service needs. They can indicate future needs for schools or services for the elderly, for example. Anthony, Derry, Liberty, Limestone and West Hemlock Townships have a large middle-aged population which will be growing older over the next 20-30 years. There is also a large school-age population which will be entering the work force within 5-15 years. Both of these population age groups have special needs. The elderly of the Townships may need assistance in order to be able to stay in their rural homes, and the school-age population may need additional job training as they enter an increasingly competitive work force.

The racial and ethnic composition of a population, as well as its proportion of men and women can be important when anticipating community needs. While Anthony, Derry, Liberty, Limestone and West Hemlock Townships do not have diverse populations ethnically or racially that could indicate special planning needs, there have been some changes in the composition of their populations since 1960 that should be noted. Tables 5A-F profile the racial and sexual composition of the Planning Area Townships and Montour County. The tables compare the population profile for each Township in 1960 with its 1990 population.

Table 5A

**Anthony Township
Sex and Race Composition**

	<u>1960</u>	<u>1990</u>
<u>Sex</u>		
Male	50.9%	48.6%
Female	49.1%	51.4%
<u>Racial Composition</u>		
White	100.0%	99.9%
Black	----	----
Other	----	.1%

Source: U.S. Bureau of Census, Census of Population, Summary of General Population Characteristics, 1960 and 1990.

The population of Anthony Township shifted from a majority of males in 1960 to a majority of females in 1990. Since 1990 Census data shows the statewide breakdown to be 52.1% female and 47.9% male, the Township's most recent ratio is now actually closer to the demographic norm for the state. The 1990 population was also slightly integrated, a change from its all-white population in 1960.

Table 5B

**Derry Township
Sex and Race Composition**

	<u>1960</u>	<u>1990</u>
<u>Sex</u>		
Male	47.8%	49.5%
Female	52.2%	50.5%
<u>Racial Composition</u>		
White	100.0%	98.3%
Black	----	.5%
Other	----	1.2%

Source: U.S. Bureau of Census, Census of Population, Summary of General Population Characteristics, 1960 and 1990.

Derry Township's population retained a female majority between 1960 and 1990, although the distribution between males and females was more equal in 1990. The 1990 population also changed from 100% white to accommodate several other races.

Table 5C

**Liberty Township
Sex and Race Composition**

<u>Sex</u>	<u>1960</u>	<u>1990</u>
Male	49.9%	49.4%
Female	50.1%	50.6%
 <u>Racial Composition</u>		
White	100.0%	99.8%
Black	----	----
Other	----	.2%

Source: U.S. Bureau of Census, Census of Population, Summary of General Population Characteristics, 1960 and 1990.

Liberty Township's population also retained a female majority between 1960 and 1990. By 1990, the population was also integrated, but like Anthony Township, the change in the racial composition of the residents was minimal.

Table 5D

**Limestone Township
Sex and Race Composition**

<u>Sex</u>	<u>1960</u>	<u>1990</u>
Male	53.5%	49.8%
Female	46.5%	50.2%
 <u>Racial Composition</u>		
White	100.0%	99.8%
Black	----	.2%
Other	----	----

Source: U.S. Bureau of Census, Census of Population, Summary of General Population Characteristics, 1960 and 1990.

Limestone Township's population shifted in composition from a male majority of over 53% in 1960 to a female majority in 1990 of slightly over 50%. As stated before, the state's population has a 52.1% female majority. Therefore Limestone's shift in population composition simply followed the state trend. Limestone Township, like Anthony and Liberty Township had a slightly more diverse racial composition in 1990 than in 1960.

Table 5E

**West Hemlock Township
Sex and Race Composition**

	<u>1960</u>	<u>1990</u>
<u>Sex</u>		
Male	53.1%	50.7%
Female	46.9%	49.3%
<u>Racial Composition</u>		
White	100.0%	100.0% *
Black	----	----
Other	----	1.5%

* 6 of these residents were classified as being of Hispanic origin.

Source: U.S. Bureau of Census, Census of Population, Summary of General Population Characteristics, 1960 and 1990.

In West Hemlock Township males continued to make up the majority of the population in 1990, although the proportion of males dropped from 53.1% in 1960 to 50.7% today. West Hemlock Township's population also changed slightly in racial and ethnic composition.

Table 5F

**Montour County
Sex and Race Composition**

	<u>1960</u>	<u>1990</u>
<u>Sex</u>		
Male	46.9%	46.8%
Female	53.1%	53.2%

(Continued on Next Page)

**Montour County
Sex and Race Composition (Continued)**

<u>Racial Composition</u>	<u>1960</u>	<u>1990</u>
White	99.7%	98.5% *
Black	0.2%	0.4%
Other	0.1%	1.1%

* 116 of these residents were classified as being of Hispanic origin.

Source: U.S. Bureau of Census, Census of Population, Summary of General Population Characteristics, 1960 and 1990.

Montour County maintained a more stable male/female population composition between 1960 and 1990 than the Townships because of its larger population base. As stated previously, Pennsylvania's 1990 population was 52.1% female and 47.9% male. Montour County's population composition of 53.2% females and 46.8% was actually quite close to the state average. The racial composition of the County as a whole became slightly more diverse between 1960 and 1990. Despite this shift, Pennsylvania's racial composition remains much more diverse than the racial distribution in Montour County. The state has an 11.5% minority population, which is much larger proportionally than Montour County's 1.5% minority population.

The educational levels of Montour County residents as a whole have increased dramatically during the period from 1960 to 1990. In 1960 slightly less than 50% of all residents 35 years of age and older were high school graduates, and only 10.1% had a Bachelor's Degree or higher levels of education. By 1990, slightly more than 75% of all county residents over the age of 25 were high school graduates and nearly 20% had received a Bachelor's Degree or higher. These increases follow national and statewide trends toward higher education levels and were reflected, to a certain extent, within the Townships as well. Table 6 below depicts the increase in educational levels for Montour County residents over 25 years of age from 1960 to 1990. (Education statistics for each of the Planning Area Townships for 1990 are presented in Table 22 of this Plan.)

Table 6

Montour County
Educational levels – 1960 and 1990 *

	High School Graduates	Bachelor's Degree Or Higher
1960	49.9%	10.1%
1990	75.2%	18.7%

* Based on County residents 25 years of age and older.

Source: U.S. Bureau of Census, Census of Population, Summary of General Population Characteristics, 1960 and 1990.

Even though educational levels have improved significantly in the past 30 years, it is still important to note that approximately one quarter of the County's population over the age of 25 are not high school graduates. This is probably due in part to the sizeable Amish and Older Order Mennonite populations living within the Planning Area and the fact that their formal education ends at the eighth grade level. (See also Sub-Section C. of Chapter 4 for a discussion of educational levels as they relate to the local economy and work force.)

Table 7 presents the marital status of residents of Montour County. Higher divorce rates in Montour County, as in the rest of the country, have contributed to a significant increase in the proportion of widowed and divorced residents during the period from 1960 to 1990. Recently County divorce rates have slowed though while the marriage rate per 1,000 individuals has exceeded the State average.

Table 7

**Montour County
Marital Status – 1960 and 1990**

	Single	Married	Widowed & Divorced
1960 *	29.3%	60.0%	10.7%
1990 **	24.8%	57.5%	17.7%

* Based on County residents 14 years of age and older.

** Based on County residents 15 years of age and older. He 1990 figures for Widowed and Divorced also include 1.7% of the population (247 individuals) who were married but legally separated.

Source: U.S. Bureau of Census, Census of Population, Summary of General Population Characteristics, 1960 and 1990.

Table 8 provides a breakdown of household types within the County in 1990. Over half of all households in Montour County were married couples and nearly half of those married couples had children living at home. Single person households made up slightly more than 25% of the County's households and the balance was comprised of single parent or non-family households.

Table 8
Montour County
Household Size and Type – 1990

Type of Household	# of Households	% of Households
Married-couple Family		
With Related Child	1,843	28.2%
No Related Child	2,076	31.7%
1 Person	1,718	26.3%
2 Person; No Spouse Present		
With Related Child	407	6.2%
No Related Child	280	4.3%
Non-Family	<u>219</u>	<u>3.3%</u>
TOTALS	6,543	100.0%

Source: U.S. Bureau of Census, Census of Population, Summary of General Population Characteristics, 1990.

Among the single-parent households, the U.S. Census Bureau reported 316 female-headed households with children (no spouse present) in Montour County in 1990. Many of these households have special social services needs. Single-parent households, special social services needs. Single-parent households, especially those headed by women, tend to be poorer than two-parent households and often need help locating day care or after school care and other support services.

According to the 1990 Census, there were no female-headed households with children under 18 years of age in West Hemlock Township, while there were 30 such households in Derry Township. Anthony Township had 18, Liberty Township had 14, and Limestone Township had 10, for a total of 72 female-headed households with minor children in the Planning Area in 1990.

C. POPULATION PROJECTIONS

There are three factors affecting the estimating of future population growth rates:

1. Birth Rate – the birth rate per 1,000 population.
2. Death Rate – the death rate per 1,000 population.
3. In-Migration/Out-Migration - The net growth or loss occurring as people move into and out of an area.

The most dominant factor in arriving at population projections for Anthony, Derry, Liberty, Limestone and West Hemlock Townships is the estimate of future in-migration and out-migration. Internal Revenue Migration Statistics show that the majority, or 89.4%, of the growth experienced between 1950 and 1990 resulted from a high rate of in-migration and a correspondingly low rate of out-migration. The five Townships in the Planning Area had a combined population of 3,184 in 1950, which grew to 5,104 by 1990. According to PA Vital Statistics figures from the PA Department of Health, the surplus of births over deaths during this 40 year period accounted for an increase of only 203 (10.6%) residents. In the future, it is likely a surplus of in-migration over out-migration will continue to be responsible for most future growth in these Townships.

It is unlikely however that the boom in growth that has taken place since 1970 will continue at the same rate for much longer. Although looking at past in/out migration patterns within these Townships is helpful, recent events, such as the completion of Interstate 80, have had an extraordinary impact on population growth. Now that Interstate 80 has been completed for over 20 years, its major impact on population growth has slowed. Also the out-migration from Danville Borough and Mahoning Township has decreased significantly since 1980. While Danville, for example, lost 15.2% of its population between 1970 and 1980, it lost only 1.4% of its population between 1980 and 1990. Even more dramatically, Mahoning Township, which lost 14.8% of its residents in the 1970-80 decade, increased its population by 5.6% between 1980 and 1990. This indicates the population shift from more urbanized areas to more rural locations within the County seems to be slowing.

In addition, the loss of farms is not expected to have as great an impact in the coming decades. The U.S. Census Bureau believes that the nationwide loss of

farmland has stabilized to great degree. (If however, aggressive land use control regulations, i.e. subdivision and zoning ordinances, are not implemented in the Planning Area, significant additional farmland may be lost to residential development.) Further, as shown in Table 2, growth rates in each of the Planning Area Townships slowed between 1980 and 1990. It is therefore doubtful that the dramatic increases experienced between 1970 and 1980 will occur again in the near future in Anthony, Derry, Liberty, Limestone and West Hemlock Townships.

A Third factor contributing to the level of growth in the Study Area municipalities is subdivision activity. Table 9 outlines subdivision activity occurring in the Planning Area Townships between 1980 and 1990. It is interesting to note though that the number of lots approved for development does not always correspond to the amount of growth occurring in a Township. For example, Liberty Township, which only gained one resident during the 1980-1990 decade, had the largest number of developable lots, 77, approved during the past decade. Derry Township, which gained 229 residents, more than the other four Townships combined, had only 46 lots approved for development. Population gains seemed to correspond more closely with the number of developable lots approved in Anthony, Limestone, and West Hemlock Townships. (The “excess” of developable parcels in Liberty Township and a possible “shortage” of developable plots in Derry Township were taken into account when future growth rates were estimated for each of the Townships.)

Table 9
Planning Area Townships
Subdivision Approvals - 1980 to 1990

	For Development	Not For Development
Anthony Township	30	18
Derry Township	46	15
Liberty Township	77	49
Limestone Township	59	22
West Hemlock Township	44	25

Source: Montour County Planning Commission, January 1992.

Table 10 provides projections of population growth for each of the Planning Area Townships to the year 2010.

Based on past patterns, each Township's growth rate was determined individually. Derry Township has the highest projected growth rate of the Planning Area Townships at 10% per decade, while Limestone Township has the lowest predicted growth rate at 4% per decade. A population increase of 6.5% per decade was estimated for Anthony Township, while Liberty and West Hemlock Township's rate was calculated at 7.5% per decade. These growth rates are roughly half of the average growth rates experienced during the 1950-1990 decades with a slight adjustment of the Derry and Liberty growth rates because of the peculiarities noted in the discussion of Table 9.

Table 10

**Estimated Population Projections for Planning Area Townships
1990 to 2010**

	1990	1995	2000	2005	2010
Anthony Township	1,287	1,329	1,371	1,416	1,460
Derry Township	1,290	1,354	1,419	1,490	1,561
Liberty Township	1,309	1,358	1,407	1,460	1,513
Limestone Township	789	805	821	838	854
West Hemlock Township	429	445	461	479	496

Source: U.S. Bureau of Census, Census of Population, 1990; PA Department of Health, State Health Data Center, PA Vital Statistics Annual Reports, 1986-1990; and estimates by Landplan, Inc., 1992.

These numbers are only estimates. It is difficult to predict future population growth for several reasons. Anthony, Derry, Liberty, Limestone and West Hemlock Townships do not exist in a vacuum. Unpredictable or unanticipated regional economic factors could impact growth in this region over the next 20 years. In general the projections were conservative because of recent national trends which indicate a widespread slow down in growth. Also the very high rates of growth that occurred after the completion of Interstate 80 are not likely to be repeated in the near future. This conservatism was however balanced by the fact that even a low growth rate in the region and the County does not guarantee a slow down of growth in Anthony, Derry, Liberty, Limestone and West Hemlock Townships. Their pleasing rural character will likely continue to attract non-farm rural residents.

D. IMPLICATIONS FOR DEVELOPMENT PLAN

Anthony, Derry, Liberty, Limestone and West Hemlock Townships must prepare for continued growth. Although it is difficult to stop growth, it is possible to guide the location and intensity of new development. The Development Plan, Chapter 10 of this document, will consider the growth predictions made in Table 10.

The Future Land Use Recommendations Map, also located in Chapter 10, will identify suitable locations for new development. Soils and topography and other physical limitations will also be reviewed as well the recommendations of Township citizens and officials obtained from the Public Opinion Survey conducted as a part of this Plan. (See Appendix A for a copy of the Survey and its results.)

CHAPTER 4.

ECONOMIC ANALYSIS

A. REGIONAL ECONOMY

Montour County and the Planning Area have historically been included in the Anthracite Region of Pennsylvania. The Anthracite Region encompasses seven counties, including Carbon, Columbia, Monroe, Montour, Northumberland, Pike and Schuylkill. The dominance of the coal and manufacturing industries in this region linked these seven counties in the past. Now, because of the area's excellent transportation network and a more diversified economy, Union and Lycoming Counties have stronger financial ties with Montour County and the Planning Area than do Carbon, Monroe, or Pike Counties.

Unemployment throughout the Anthracite Region has been consistently higher than the state average in recent years. Manufacturing jobs have been lost throughout the area. Despite a sluggish regional economy, many of the Planning area Townships enjoy higher incomes and lower unemployment than the surrounding counties. In fact, Montour County has more financial strength than any Pennsylvania county in this part of the state.

Montour County municipalities have traditionally relied less on manufacturing jobs than many of the surrounding counties which has helped them weather the current recession. Service industries, with medical services and health care positions dominant, provide most of the employment in Montour County. (See Table 14.) The service sector of the local economy provides more than three times the wages and total number of jobs than does the manufacturing sector of the local economy according to 1990 Census figures. (See Table 19). Being less dependent on manufacturing has helped to keep the local economy stable. Less dependence on manufacturing has also reduced the negative impact being experienced in other locations by the loss of industrially-based jobs.

Anthony, Derry, Liberty, Limestone and West Hemlock Township residents have high incomes compared with the rest of the region. The local economy of the Planning Area has the advantage of several excellent employers providing a stable base of well-paying jobs. This has helped to keep the unemployment rate relatively low in the Planning Area municipalities. While Montour County's unemployment rate has been increasing along with the unemployment rates of other counties in the region, it remains significantly lower than the unemployment rates in counties in the immediate area. (See Table 11.)

B. EMPLOYMENT / UNEMPLOYMENT / INCOME

Employment levels and incomes in an area have a major impact on the local economy. Unemployment rates, the size of the work force, categories of employment and income levels will be reviewed for the Planning Area municipalities and compared with the economic profile of the surrounding region.

Since unemployment data is not available for each individual Township in the Planning Area, rates for Montour County as a whole will be examined. In recent years, unemployment in Montour County has been rising. The 1991 unemployment rate was the highest it has been since 1985. Montour County's unemployment rate is still; however, lower than the rate in nearby counties. Table 11 compares recent unemployment rates for Montour and surrounding counties.

Table 11

**Montour County and Surrounding Counties
Unemployment Rates – 1987 to 1991**

	1987	1988	1989	1990	1991
Montour County	5.0%	4.6%	4.3%	5.3%	6.2%
Columbia County	7.1%	5.7%	5.5%	6.7%	8.6%
Lycoming County	5.6%	5.3%	5.9%	7.2%	8.0%
Northumberland County	7.7%	7.3%	6.6%	8.6%	10.1%
Snyder County	4.1%	5.1%	5.3%	7.5%	7.6%
Union County	4.5%	4.4%	4.1%	5.5%	7.8%

Source: U.S. Bureau of Census, Summary of General Income Characteristics, 1990.

As of September of 1992, Montour County's unemployment rate remained at 6.2%. The County continues to enjoy the lowest unemployment rate in the region and has consistently had a lower rate than nearby counties, as Table 11 shows. In addition, Montour County's 1991 annual unemployment rate was also significantly lower than Luzerne (8.8%), Union (7.8%), Snyder (7.6%), Schuylkill (9.7%), and Sullivan (9.3%) Counties. While September 1992's 6.2% unemployment rate was not insignificant, it was a stable and relatively "healthy" rate for this part of the state.

Table 12 outlines the employment rate by sex for Anthony, Derry, Liberty, Limestone and West Hemlock Townships as a percentage of residents over age 16.

Table 12

**Planning Area Townships and Montour County
Employment Status, by Sex of Worker – 1990**

	<u>Total Labor Force</u> *	<u>% & # Working Males</u>	<u>% & # Working Females</u>
Anthony Township	932 (455 Male)	76.5% (348)	57.0% (272)
Derry Township	912 (451 Male)	76.3% (344)	65.3% 301
Liberty Township	1,016 (505 Male)	77.4% (391)	59.7% (305)
West Hemlock Township	342 (177 Male)	82.5% (146)	69.7% (115)
MONTOUR COUNTY	13,863 (6,332 Male)	71.7% (4,539)	53.9% (4,059)

* Persons 16 years of age and older; includes persons unemployed but seeking work.

Source: U.S. Bureau of Census, 1990 Census of Population and Housing, Summary of Social, Economic and Housing Characteristics, July 1992.

An increase in the number of female workers has been the most significant change in the composition of the work force since 1980. Much of the increase in Pennsylvania's labor force between 1980 and 1990 can be attributed to more women in the work force. The trend towards more women in the labor force has also been evident in the Planning Area. The 1990 Census reported that over 61.6% of women with children less than 6 years of age were working in Derry Township, 62.2% in Liberty Township, 62.7% in Limestone Township, and 74.1% in West Hemlock Township. In Anthony Township, a lower percentage, 39.1% of females with children under 6 were employed outside of the hoe in 1990. As Table 12 illustrates, the Planning Area municipalities have a higher percentage of both men and women working than Montour County as a whole. This is likely due to the low median age of the population in the Planning Area. Table 4 in Chapter 3 illustrates the comparatively low percentage of senior citizens residing in the Planning Area

municipalities as compared to Montour County as a whole. As a result, the Planning Area Townships have a higher percentage of individuals between the ages of 18 and 64 participating in the work force.

Senior citizens in the Planning Area are likely collecting Social Security wages as retired workers, widows or widowers. The Social Security Administration reports recipients by zip code, so data specific to the Planning Area was unavailable. A total of 3,551 individuals were receiving benefits in December 1990 in the 17821 zip code. Over 65% of the recipients were retired workers. The remaining were widows and widowers; disabled workers; and children.

While a significant number of government and self-employed workers live in the Planning Area, most residents work in the private sector for wage or profit. A small portion of the workers, typically family farm laborers, do not receive direct wages. Table 13 shows the categories of employment for employed residents age 16 or older.

Table 13
Planning Area Townships and Montour County
Class of Workers * - 1990

	Private Sector For Wage Or Profit	Government Local/State Or Federal	Self Employed Workers	Unpaid Family Workers
Anthony Township	78.5%	8.2%	11.4%	1.9%
Derry Township	81.5%	8.6%	9.1%	.8%
Liberty Township	77.4%	11.2%	9.9%	1.5%
Limestone Township	69.2%	6.5%	21.0%	3.3%
West Hemlock Twp.	79.9%	10.9%	8.5%	1.6%
MONTOUR COUNTY	80.9%	11.7%	6.3%	1.1%

*Persons 16 years of age and older; does not include unemployed persons or persons in the armed forces.

Sources: U.S. Bureau of Census, 1990 Census of Population and Housing, Summary of Social, Economic and Housing Characteristics, July 1992.

Workers in the Planning Area held a variety of jobs in 1990. The diversity in the economy was identified as a strength in Section A of this chapter and is clearly illustrated in Table 14. (See next page for Table 14.) Table 14 shows that the manufacturing industry continues to employ a sizeable portion of the work force, both in the Planning Area Townships and in the County as a whole, but health services and other professional positions are beginning to erode that dominance. In each of the Study Area municipalities, with the exception of West Hemlock Township, manufacturing (including durable and non-durable industries) employs the greatest number of persons. Jobs in the health care industry are however generally in second or third place. It is interesting to note that despite the large number of farms and farming operations throughout the Planning Area, the agriculture industry accounts for a comparably small overall number of jobs in each of the Township's labor force. (Limestone Township appears however to be an exception, where agriculture runs a very close second to manufacturing.)

When looking at the County as a whole, jobs in the health services field rank in first place, employing 2,566 persons, or 31.1% of the total labor force. Manufacturing is second with a total of 1,550 positions, or 18.8% of the available jobs, retail trade is third, providing for 1,027 persons, or 12.5%, and education services rank fourth with 508 employees, or 6.2% of the labor force. According to the 1990 Census, agricultural operations employ only 301 persons, or 3.7% of the work force, countywide, placing that industry in eighth position among all categories of employment. The statistics in Table 14 clearly show that the majority of individuals living and working in Montour County are employed in jobs not associated with the land or agriculture. Although the numbers are not as dramatic in the Planning Area Townships, in each case, except for Limestone Township, agriculture actually provides less than 10% of the jobs in the municipality's total labor force. (See next page for Table 14.)

Tables 15 and 17 will review per capita, family and household incomes for each municipality in the Planning Area. Table 16 will compare the income rates of Montour County with surrounding counties. Census definitions of per capita, family and household incomes are as follows.

Family Income: Family income is calculated by combining the incomes of all family members 15 years of age and older and considering the as a single amount.

Household Income: Household income includes the income of the primary householder and all other persons 15 years old and over in the household, whether related to the householder or not. (Because many households consist of only one person, average household income is usually less than average family income.)

Median Income: Median income is income divided into two equal parts; one part where the incomes are above the median and the other part where the incomes are below the median. For household and families, the median income is

based on the distribution of total number of units including those with no income. The median for persons is based on persons with income.

Per Capita Income: Per capita income is aggregate income divided by the total population.

Table 15 depicts the growth of per capita income in the Planning Area between 1980 and 1990 and compares it with the growth in per capita income for the same time period in Montour County. The figures show a slower rate of per capita income growth for the Planning Area than in the County as a whole. In general, the incomes in the Planning Area have been lower than the income levels in Montour County over the last 10 years.

Table 15

**Planning Area Townships and Montour County
Per Capita Income – 1980 and 1990 ***

	<u>1980</u>	<u>1990</u>	<u>% Change</u>
Anthony Township	\$5,571	\$10,554	89.5%
Derry Township	\$5,148	\$10,565	105.2%
Liberty Township	\$5,777	\$11,744	103.3%
Limestone Township	\$5,805	\$9,971	71.8%
West Hemlock Township	\$6,321	\$13,645	115.9%
MONTOUR COUNTY	\$6,336	\$13,769	117.3%

* 1980 income figures are for calendar year 1979 and 1990 income figures are for calendar year 1989.

Source: U.S. Bureau of Census, 1980 and 1990 Census of Population and Housing, Summary of General Income Characteristics, 1982 and 1992. Percentages calculated by Landplan, Inc., 1993.

Although per capita incomes are lower in the Planning Area Townships than in Montour County, these per capita income levels are not significantly lower than the per capita income levels in nearby Counties. Table 16 compares Montour County incomes with Columbia, Lycoming, Northumberland, Snyder and Union Counties. When table 15 and Table 16 are reviewed together it is clear the per capita income levels in the Planning Area are close to the per capita income levels outside Montour County.

Table 16

**Montour County and Surrounding Counties
Income Levels – 1990**

	<u>Per Capita Income</u>	<u>Median Family Income</u>	<u>Median Household Income</u>
MONTOUR COUNTY	\$13,769	\$33,130	\$27,260
Columbia County	\$10,959	\$29,355	\$24,211
Lycoming County	\$11,714	\$30,461	\$25,552
Northumberland	\$10,819	\$27,669	\$22,124
Snyder County	\$10,859	\$30,302	\$25,864
Union County	\$11,679	\$31,776	\$27,622

Source: U.S. Bureau of Census, 1990 Census of Population and Housing, Summary of General Income Characteristics, 1992.

Table 17 looks at the median family and median household incomes in the Planning Area Townships. These household and family income levels are comparable to the incomes for surrounding counties reported in Table 16.

Table 17

**Planning Area Townships
Median Family and Household Income – 1990**

	<u>Median Family Income</u>	<u>Median Household Income</u>
Anthony Township	\$29,375	\$27,448
Derry Township	\$27,396	\$26,250
Liberty Township	\$32,500	\$28,542
Limestone Township	\$29,500	\$25,859
West Hemlock Township	\$38,854	\$37,344

Source: U.S. Bureau of Census, 1990 Census of Population and Housing, Summary of General Income Characteristics, 1992.

Unfortunately, the area's overall economic conditions have not affected all residents similarly. The 1990 Census figures showed a significant number of

families and persons were below poverty level in the Planning Area municipalities and in Montour County as a whole. Lack of a formal education may account for some of the increase in poverty in the region. (The Area's sizeable Amish population likely affects the overall education levels of the Study Area to a certain degree because their formal schooling ends at the eighth grade.) While overall the County has one of the highest education levels in Northeastern Pennsylvania, there are segments of the population scattered throughout the County where the levels of completed schooling are low. (See Tables 21 and 22.) According to Underemployment of Pennsylvania Workers, published by the State Data Center in 1990, high school drop outs and younger workers are more likely to be underemployed, i.e. "working poor" or unemployed. Table 18 examines the number of persons and families classified as poverty level in the Planning Area and in the County as well.

Table 18

**Planning Area Townships and Montour County
Families and Persons Below Poverty Level – 1990**

	<u>Total Persons*</u>	<u>Persons Below Poverty Level</u>	<u>Total Families</u>	<u>Families Below Poverty Level</u>
Anthony Township	1,280	131 (10.2%)	362	29 (8.0%)
Derry Township	1,282	199 (15.5%)	199	45 (12.4%)
Liberty Township	1,307	93 (7.1%)	390	18 (4.6%)
Limestone Township	783	56 (7.2%)	220	8 (3.6%)
West Hemlock Township	428	18 (4.2%)	119	4 (3.4%)
MONTOUR COUNTY	16,610	1,418 (8.0%)	4,529	272 (6.0%)

* Total persons for whom poverty status is determined.

Source: U.S. Bureau of Census, 1990 Census of Population and Housing, Summary of Social, Economic and Housing Characteristics, June 1992.

C. LOCAL ECONOMY/WORK FORCE/EDUCATION LEVELS

Montour County has been insulated from some of the effects of the current national recession because of its diversified employment base. As Table 13 shows, the service industry, including health care positions, dominates the economy. This base of well paying jobs helps the entire region and Montour County in particular. The County has also been fortunate to retain its manufacturing jobs despite the economic downturn and the recent nationwide movement of manufacturing jobs to southern states and out of the country. While Montour County lost 300 jobs (mostly in manufacturing) between 1989 and 1991, these job losses were spread throughout the county and do not represent any major plant closings. On a more positive note, Fabtex Inc., a textile manufacturer in Danville, expanded their employment base during 1991. Overall, the local economy has been fairly stable in recent years.

Table 19 outlines the broad base of Montour County employment by breaking down the amount of wages paid by each business category and the number of positions in each category in the County, as reported in the 1990 Census. (These figures are intended to represent the number and types of jobs available throughout the County, not the number and types of jobs held by Montour County residents. Table 14 provides detailed information on the employed civilian labor force residing in each Planning Area Township and in Montour County as a whole.) As shown in Table 19, service sector jobs were dominant and provided more than 77% of the area's wage income. Manufacturing jobs accounted for the second highest number of jobs within the County, but actually accounted for little more than 10% of the total wages paid in the area in 1990.

While agriculture did not support many employees in Montour County according to the 1990 Census, the sale of agricultural products in the County was significant. Sales from field crops; vegetables and potatoes; fruits; horticulture and mushrooms totaled nearly \$5.1 million in 1988. Livestock and livestock product sales exceeded \$8.7 million and government payments totaled approximately \$.6 million. Overall agriculture contributes over \$11 million annually to the Montour County economy. Average sales from each of the County's 270 farms totaled \$41,848 in 1988.

Table 19
Montour County Employment – 1990

Category	Total Employees	Total Wages	Average Per Capita Wage
Agriculture	18	\$ 282,552	\$ 15,697
Construction	167	\$ 2,709,430	\$ 16,223
Manufacturing	1299	\$ 31,675,928	\$ 24,384
Transportation	398	\$ 12,695,692	\$ 31,898
Wholesale	286	\$ 7,541,100	\$ 26,367
Retail	914	\$ 8,187,760	\$ 8,958
Finance/Insurance Real Estate	157	\$ 2,473,524	\$ 15,754
Service (includes Medical)	7828	\$ 234,924,092	\$ 30,010
Public Admin.	<u>195</u>	<u>\$ 2,559,488</u>	<u>\$ 13,125</u>
TOTALS	11,262	\$ 303,049,566	\$ 26,909

Note: The total number of jobs within Montour County exceeds the number of resident workers within the County. There are approximately 8,600 persons in the County's labor force, including those persons who are unemployed but looking for work.

Source: A Summary of the "Needs Assessment Forum" For Montour County, Sponsored by the Montour County Townships COG and Montour County Cooperative Extension, January 7, 1992.

Montour County actually has an "excess" number of health care related jobs. The best example of this fact is that only half of Geisinger Medical Center's nearly 4,000 local employees reside in the County. In fact, the economics department of Bloomsburg University estimates jobs in Montour County actually outnumber the resident labor force by more than 2,500 and Table 19 would seem to support that theory.

In addition to the many employers within Montour County, the excellent transportation network provides residents of the Planning Area with easy access to numerous employers outside the County as well. These employers provide in excess of 19,000 jobs within reasonable commuting distance for Planning Area residents are listed in Table 20.

Table 20
Major Employers for Planning Area Townships

<u>Employer</u>	<u># of Employees</u>
Geisinger Medical Center (Total Geisinger System – 7,480)	3,944
American Home Foods	2,100
Bucknell University	943
Bloomsburg University	900
Danville State Hospital	673
Central Susque. Inter. Unit	550
Magee Industrial	550
Merck & Co., Riverside	500
Milco Industries	500
Fleetwood Motor Homes of PA, Inc.	400
Ritz-Craft Corp of PA, Inc.	400
Danville School District	358
ACF, Milton	350
TRW	340
Strick, Washingtonville	330
Textron	325
Catawissa Lumber (2 Plants)	305
Warrior Run School District	225
Cabinet industries	215
Pennsylvania Power & light	190
Grandview Health Homes	167
Maria Joseph Nursing Home	118
Kennedy Van Saun	108
Country Maid Sportswear	100
Montour County	84
HH Knoebel Sons, Inc. Park & Lumber Yard	80 – 800
Gold Star Nursing Home	80
Day's Inn, Danville	70
McDonald's, Danville	55
Fabtex, Inc.	48
American Selected Products	40
Perkins Restaurant	40
Howard Johnson's & Countryside Kitchens	39
Dutch Pantry	38
Danville Borough	35
Leighow Oil	28

(Continued on next page)

Major Employers for Planning Area Townships (Continued)

<u>Employer</u>	<u># of Employees</u>
Lun Data, Lewisburg	23
Red Roof Inn, Danville	22
Lycoming Silica Sand	20
Mahoning Township	16
Paper Magic, Elysburg	2 – 40
Pro-Cut Technology, Lewisburg	8
Royer's Quarry	6
Herr Milling	4

Note: Employee numbers include part-time and seasonal workers

Source: Pennsylvania Employment Service of Montour County, Danville Chamber of Commerce, and individual businesses and industries, June 1993.

The residents of the Planning Area are fortunate to live in close proximity to many employers with wage scales higher than average for the region. The attractive wage rates and benefits of employers like TRW, Merck & Co. and others help companies to maintain valued employees and create an overall stable economic environment.

Numerous businesses and industries were attracted to and stay in the area because of the well-educated work force located in the immediate vicinity. Table 21 shows Montour County residents to be among the best educated in this region of the State; that is, a greater percentage of Montour County residents have graduated from high school and at least four years of college than in any of the surrounding counties. This is likely due to the number of highly-skilled, college-trained employees working for Geisinger Health Care System.

While the levels of completed education in Anthony, Derry, Liberty, Limestone and West Hemlock Townships are lower than the County average, education levels in the Townships are actually quite similar to education levels in many of the surrounding counties. Table 21 illustrates the education levels for Montour County and its neighboring counties, while Table 22 compares the education levels of the Planning Area municipalities with Montour County.

Table 21

**Montour County and Surrounding Counties
Education Levels* - 1990**

	<u>High School Graduates</u>	<u>College Graduates</u>
Montour County	75.2%	18.7%
Columbia County	73.1%	12.5%
Lycoming County	74.5%	12.3%
Northumberland County	68.5%	8.6%
Snyder County	64.4%	10.6%
Union County	73.1%	17.5%

* Persons 25 years of age and older.

Source: U.S. Bureau of Census, 1990 Census of Population and Housing, Summary of Social, Economic and Housing Characteristics, June 1992.

Table 22 shows a smaller percentage of high school graduates reside in most of the Planning Area Townships than in Montour County as a whole. (As noted earlier however, the Area's sizeable Amish population, whose formal schooling does not continue beyond the eighth grade, likely, skews these figures somewhat.) A look at the statistics for the other municipalities in the County reveals that many of the highly-educated Geisinger employees appear to reside in Mayberry, Mahoning and Valley Townships.

Table 22

**Planning Area Townships
Education Levels * - 1990**

	<u>High School Graduates</u>	<u>College Graduates</u>
Anthony Township	71.7%	7.8%
Derry Township	66.6%	9.8%
Liberty Township	73.1%	11.2%
Limestone Township	65.5%	6.5%
West Hemlock Township	81.1%	15.2%

* Persons 25 years of age and older.

Source: U.S. Bureau of Census, 1990 Census of Population and Housing, Summary of Social, Economic and Housing Characteristics, June 1992.

Challenging economic times are likely to continue. Since many employers are demanding higher skill levels from their workers, job training and retraining programs would seem to be a good investment. The use of continuing education programs could also help ensure the continuation of low unemployment rates and help decrease the number of persons living below the poverty level in the future.

D. EMPLOYMENT FORECASTS

As shown in Tables 21 and 22, the education levels in Montour County as a whole are higher than the education levels in neighboring counties. Since education makes the “greatest difference in both unemployment and underemployment in Pennsylvania” according to Underemployment of Pennsylvania Workers, published by the PA State Data Center in 1990, the comparatively high education levels in Montour County should continue to keep the local economy stable. While Planning area residents are faring well economically at the present time, they will continue to lag behind the rest of Montour County without preparation for a more competitive economy. High school drop-outs in the Planning Area municipalities face the most economic risk in the future.

Job retention in the local economy should continue to be excellent but job growth will likely be slow in the near future because of slow growth in the economy nationwide. Overall the economy should remain stable.

E. TOWNSHIP FISCAL ANALYSES

Statistics compiled from annual audit reports for the five Planning Area Townships for 1989, 1990 and 1991 were used to assemble the information presented in this Section of the Plan. Tables 23-30 provide further details and breakdown the financial figures contained in the audit reports.

1. Taxes and Other Revenues

A breakdown of all revenues collected in Anthony, Derry, Liberty, Limestone and West Hemlock Townships from 1989 through 1991 is presented in Table 23. Overall, each of the Townships showed larger revenues for 1991 than for 1989 and 1990, as did Anthony Township from 1990 to 1991. “Act 511” taxes and non-tax revenues, including liquid fuels allocations, were the largest components contributing to total revenues. (Liquid fuels dollars made up nearly half of each of the Townships’ total

revenues.) Real estate taxes, which represent a comparatively small portion of total revenues for the Planning Area Townships, were stable during the three year period. Most of the gains in income can therefore be attributed to changes in non-tax revenues, i.e. increased liquid fuels allocations or increases in “Act 511” tax receipts.

Table 23

**Planning Area Townships
Total Revenues, by Category
1989, 1990 and 1991**

		<u>Total Revenues</u>	<u>Total Act 511 Taxes</u>	<u>Real Estate Taxes</u>	<u>Total Non-Tax Revenues*</u>
Anthony Township	1989	\$117,547	\$45,828	\$11,389	\$ 60,330
	1990	\$131,010	\$49,875	\$12,213	\$ 68,922
	1991	\$126,495	\$48,967	\$11,934	\$ 65,594
Derry Township	1989	\$150,968	\$69,164	\$14,485	\$ 67,319
	1990	\$146,686	\$64,580	\$15,829	\$ 66,277
	1991	\$153,765	\$70,947	\$15,747	\$ 67,071
Liberty Township	1989	\$163,390	\$80,314	\$13,555	\$ 69,521
	1990	\$181,018	\$78,028	\$14,576	\$ 88,414
	1991	\$254,449	\$87,119	\$13,788	\$153,542
Limestone Township	1989	\$101,431	\$45,561	\$10,480	\$ 45,390
	1990	\$109,945	\$46,444	\$10,573	\$ 52,928
	1991	\$109,534	\$48,362	\$10,630	\$ 50,542
West Hemlock Township	1989	\$ 44,958	\$22,337	\$ 2,391	\$ 20,230
	1990	\$ 53,657	\$26,745	\$ 2,393	\$ 24,519
	1991	\$ 53,692	\$29,083	\$ 2,676	\$ 21,933

* Includes Liquid Fuels income, fines and forfeits, intergovernmental grants, revenues collected from licenses and permits, and other miscellaneous revenue sources.

Source: PA Department of Community Affairs, Local Government Financial Statistics, 1989, 1990 and 1991.

Table 24 details the various taxes collected in the Planning Area under authority of Act 511 of 1965, the Local Tax Enabling Act. All five Study Area municipalities showed increases in their total "Act 511" receipts between 1989 and 1991. Derry and Liberty Townships' "Act 511" revenues dipped between 1989 and 1990 though due to decreases in the number of real estate transfers and in the case of Derry Township, a decline in Occupational Privilege taxes. Derry Township remains the only Township in the Planning Area collecting occupational privilege taxes.

Table 24

**Planning Area Townships
Total "Act 511" Revenues, by Type
1989, 1990 and 1991**

	Total "Act 511" Revenues	Per Capita	Earned Income	Real Estate Transfer	Occ- pation Privilege
Anthony Township					
1989	\$45,828	\$3,748	\$38,128	\$ 3,952	--
1990	\$49,875	\$3,819	\$42,103	\$ 3,953	--
1991	\$48,967	\$3,912	\$40,471	\$ 4,584	--
Derry Township					
1989	\$69,164	\$3,100	\$49,711	\$10,071	\$6,282
1990	\$64,580	\$3,277	\$48,842	\$ 7,316	\$5,145
1991	\$70,947	\$2,807	\$56,285	\$ 7,355	\$4,500
Liberty Township					
1989	\$80,314	\$4,027	\$68,451	\$ 7,836	--
1990	\$78,028	\$4,168	\$68,944	\$ 4,916	--
1991	\$87,119	\$6,487	\$74,772	\$ 5,860	--
Limestone Township					
1989	\$45,561	\$2,243	\$43,318	--	--
1990	\$46,444	\$2,191	\$44,253	--	--
1991	\$48,362	\$2,437	\$45,925	--	--
West Hemlock Township					
1989	\$22,337	\$ 840	\$21,497	--	--
1990	\$26,745	\$ 871	\$22,691	--	\$3,183*
1991	\$29,083	\$ 867	\$25,283	\$ 2,933	--

* Other "Act 511" taxes.

Note: None of the Planning Area Townships collected Mercantile or Amusement taxes in 1989, 1990 or 1991.

Source: PA Department of Community Affairs, Local Government Financial Statistics, 1989, 1990 and 1991.

As shown on Table 24, earned income taxes were the largest source of “Act 511” revenue for each of the Townships between 1989 and 1991. During that period these taxes accounted for over 80% of the total “Act 511” revenues in Anthony, Liberty, Limestone, and West Hemlock Townships. In Derry Township, earned income taxes accounted for approximately 75% of all ‘Act 511” revenues.

Although real estate taxes amounted to less than 10% of the total revenues collected in the Planning Area Townships (see Table 23), they are important sources of income to consider because they are a tax component which could be affected by land use decisions. Table 25 shows the number of parcels, total assessed value, and average assessed value per parcel for each of the Planning Area Townships in 1990.

Table 25
Planning Area Townships
Number of Parcels and Assessment Values – 1990

	Number of Parcels	Total Assessment	Average Assessed Value
Anthony Township	621	\$2,429,390	\$3,912.06
Derry Township	566	\$2,692,060	\$4,756.29
Liberty Township	719	\$2,727,150	\$3,792.98
Limestone Township	357	\$1,889,500	\$5,292.72
West Hemlock Township	189	\$ 877,960	\$4,645.29

Source: Danville Area Chamber of Commerce, 1991. Average values calculated by Landplan, Inc., October 1992.

2. Expenditures

Municipal expenditures for 1989-1991 are presented below and have been divided into two general categories; 1) operational and maintenance expenditures and 2) capital outlay expenditures. Table 26 provides a breakdown of total expenses by category, Table 27 illustrates specific types of operational and

maintenance expenditures experienced by the PA Townships, and Table 28 itemizes the capital outlay expenditures made from 1989 to 1991.

Table 26
Planning Area Townships
Total Expenditures, By Category
1989, 1990 and 1991

	Total Expenditures	Total Oper. & Mainten.	Total Capital Outlay
Anthony Township			
1989	\$ 79,883	\$ 79,883	\$ --
1990	\$ 97,478	\$ 88,478	\$ --
1991	\$189,111	\$168,331	\$11,761
Derry Township			
1989	\$152,344	\$124,387	\$ --
1990	\$208,025	\$122,167	\$ 450
1991	\$150,647	\$104,762	\$ --
Liberty Township			
1989	\$131,467	\$111,337	\$ --
1990	\$239,833	\$222,137	\$ --
1991	\$215,954	\$162,484	\$ --
Limestone Township			
1989	\$ 42,655	\$ 30,641	\$ 1,425
1990	\$ 51,471	\$ 43,588	\$ --
1991	\$106,681	\$ 64,682	\$ --
West Hemlock Township			
1989	\$ 43,869	\$ 31,635	\$ --
1990	\$ 35,025	\$ 20,392	\$ --
1991	\$ 51,677	\$ 34,806	\$ --

Source: PA Department of Community Affairs, Local Government Financial Statistics, 1989, 1990 and 1991.

Operational and maintenance expenses accounted for well over half of each of the Townships' total expenditures during the three year period from 1989 to 1991. Table 27 shows that the maintenance of local streets and roads was the heaviest financial burden for the Planning Area Townships, followed by general government expenses.

Table 27

**Planning Area Townships
Operations and Maintenance Expenditures, by Type
1989, 1990 and 1991**

	Total Oper. & Maint.	General Governm't *	Streets & Highways	Fire Protect.	All Other **
Anthony Township					
1989	\$ 79,883	\$19,463	\$ 49,090	\$ 6,490	\$ 4,840
1990	\$ 88,478	\$30,820	\$ 46,203	\$ 5,799	\$ 5,656
1991	\$168,331	\$44,017	\$115,038	\$ 6,161	\$ 3,115
Derry Township					
1989	\$124,387	\$14,328	\$ 88,313	\$ 4,044	\$17,702
1990	\$122,167	\$20,702	\$ 91,077	\$ 4,408	\$ 5,980
1991	\$104,762	\$27,116	\$ 64,387	\$ 4,962	\$ 8,297
Liberty Township					
1989	\$111,337	\$14,472	\$ 69,152	\$ 5,000	\$22,713
1990	\$222,137	\$16,607	\$165,223	\$10,915	\$29,392
1991	\$162,484	\$24,579	\$105,288	\$10,057	\$22,560
Limestone Township					
1989	\$ 30,641	\$ 7,320	\$ 13,166	\$ 3,000	\$ 7,155
1990	\$ 43,588	\$13,860	\$ 13,619	\$ 6,016	\$10,093
1991	\$ 64,682	\$10,843	\$ 38,731	\$ 6,170	\$ 8,938
West Hemlock Township					
1989	\$ 31,635	\$ 7,985	\$ 20,774	\$ 931	\$ 1,945
1990	\$ 20,392	\$ 7,539	\$ 7,935	\$ 1,941	\$ 2,977
1991	\$ 34,806	\$12,012	\$ 16,630	--	\$ 6,164

* Includes general administration and the cost of the tax collection.

** Includes expenditures for sanitary sewer and sewage treatment (Limestone Township only); refuse collection and disposal (Liberty and West Hemlock Townships); health services (Derry Township – 1989 and West Hemlock Townships – 1991); libraries; parks and recreation; protective inspections; and other miscellaneous expenditures.

Source: PA Department of Community Affairs, Local Government Financial Statistics, 1989, 1990 and 1991.

As can be seen in Table 28, street and highway construction project costs also dominated the capital outlay expenditures of the Planning Area municipalities from 1989 to 1991, as they did the operational and maintenance expenditures.

Table 28

**Planning Area Townships
Capital Outlay Expenditures, by Type
1989, 1990 and 1991**

	Total Expenditures	Total Oper. & Mainten.	Total Capital Outlay
Anthony Township			
1989	--	--	--
1990	\$ 9,000	\$ 9,000	--
1991	\$20,780	\$ 9,019	\$11,761
Derry Township			
1989	\$27,957	\$27,957	\$ --
1990	\$85,858	\$85,408	\$ 450
1991	\$45,885	\$45,885	\$ --
Liberty Township			
1989	\$20,130	\$20,130	\$ --
1990	\$17,696	\$17,696	\$ --
1991	\$53,470	\$53,470	\$ --
Limestone Township			
1989	\$12,014	\$10,589	\$ 1,425
1990	\$ 7,883	\$ 7,883	\$ --
1991	\$41,999	\$41,999	\$ --
West Hemlock Township			
1989	\$12,234	\$12,234	\$ --
1990	\$14,633	\$14,633	\$ --
1991	\$16,871	\$16,871	\$ --

* Includes capital outlay for general government.

Source: PA Department of Community Affairs, Local Government Financial Statistics, 1989, 1990 and 1991.

3. Comparison of Revenues and Expenditures

Tables 29 and 30 compare revenues and expenditures from 1989 to 1991 in the Planning Area. Table 29 summarizes the total income and expenses for the

three year period and Table 30 presents revenues and expenditures on a per capita basis.

As Table 29 illustrates, each of the Study Area municipalities experienced revenue increases between 1989 and 1991. Several of the Townships however experienced dips in the amount of revenue collected during the period. Anthony Township, for example, posted an overall gain in revenue from total collected for 1990. With portions of a municipality's total tax revenue, in particular its earned income and real estate transfer taxes, dependent on regional economic factors, the Planning Area Townships should budget expenditures very carefully over the next few years in order to avoid the need for major tax increases and/or avoid significant draw-downs on reserve funds.

Table 29

**Planning Area Townships and Montour County
Comparison of Revenues and Expenditures
1989, 1990 and 1991**

		Total Revenues	Total Expenditures
Anthony Township	1989	\$117,547	\$ 79,883
	1990	\$131,010	\$ 97,478
	1991	\$126,495	\$189,111
Derry Township	1989	\$150,968	\$152,344
	1990	\$146,686	\$208,025
	1991	\$153,765	\$150,647
Liberty Township	1989	\$163,390	\$131,467
	1990	\$181,018	\$239,833
	1991	\$254,449	\$215,954
Limestone Township	1989	\$101,431	\$ 42,655
	1990	\$109,945	\$ 51,471
	1991	\$109,534	\$106,681
West Hemlock Township	1989	\$ 44,958	\$ 43,869
	1990	\$ 53,657	\$ 35,025
	1991	\$ 53,692	\$ 51,677
MONTOUR COUNTY	1989	\$2,860,215	\$2,673,388
	1990	\$3,083,089	\$2,967,141
	1991	\$3,676,006	\$3,360,842

Source: PA Department of Community Affairs, Local Government Financial Statistics, 1989, 1990 and 1991.

Table 29 shows that Anthony, Derry and Liberty Townships each had budgets with expenditures exceeding revenues at least once during the three year period from 1989 to 1991. Major road maintenance projects helped push expenditures beyond revenues in 1991 in Anthony Township, in 1989 and 1990 in Derry Township, and in 1990 in Liberty Township. (Road maintenance and other expenditures are itemized in Table 27.) Excess revenues in other years though helped to balance these shortfalls. All of the Townships, except Derry, showed an excess of total revenues over total expenditures between 1989 and 1991.

Table 30 presents expenditures and revenues on a per capita basis. This information is helpful when comparing each of the Townships and the entire Planning Area with Montour County as a whole.

Table 30

**Planning Area Townships and Montour County
Total Revenues and Expenditures Per Capita
1991**

	Revenues Per Capita	Expenditures Per Capita
Anthony Township	\$ 98.29	\$ 146.94
Derry Township	\$ 120.88	\$ 118.43
Liberty Township	\$ 194.38	\$ 164.98
Limestone Township	\$ 139.18	\$ 135.55
West Hemlock Township	\$ 133.56	\$ 128.55
MONTOUR COUNTY	\$ 154.70	\$ 138.36

Source: PA Department of Community Affairs, Local Government Financial Statistics, 1991.

Generally Speaking, it appears that the Planning Area Townships can afford their current level of expenditures. However, since there were limited amounts of excess funds in any of the Township budgets from 1989 to 1991, major new projects or increased municipal services would likely require a draw-down on available reserve accounts or additional funding from tax or non-tax revenue sources. Careful

budget planning will be necessary in the future to avoid major tax increases for residents and to avoid seriously depleting increases for residents and to avoid seriously depleting reserve funds.

CHAPTER 5.

COMMUNITY FACILITIES AND SERVICES

The facilities and services available in a community directly contribute to the health and safety of area residents. A wide range of facilities strengthen the attractiveness of a region and help make life enjoyable for its citizens. This chapter will review the availability and adequacy of government facilities and services; police and fire protection; health and social services; schools and educational opportunities; and recreational facilities. Each of these components also helps keep the local economy competitive within the region.

A. GOVERNMENT FACILITIES AND SERVICES

Montour County provides a variety of services from its Courthouse in Danville and its Woodbine Road Annex. Several of these were listed in Chapter 2, Section E. In addition the County also provides a clearing-house for many of the social service agencies serving the Planning Area. These will be discussed in Section E of this Chapter.

Within the Planning Area, Anthony, Derry, Liberty, Limestone, and West Hemlock Townships maintain local government facilities and provide a limited range of services, most related to Township road maintenance.

Anthony Township owns approximately 6 acres in the Village of Exchange, including and surrounding their community building which is the former Anthony Consolidated School. The Township owns a full complement of road working equipment – three trucks, a grader, a back hoe, a pay-loader and three mowers – which they find adequate for their current needs.

Derry Township's Municipal Building, located just south of Washingtonville, was built approximately 10 years ago and is in very good condition. The municipality owns roughly 3 acres around the building site. The Township plans to purchase a new truck in 1993 which will bring their total to three trucks, one grader, and one brush-mowing or "hedgehog" vehicle. After purchasing the new vehicle, Township officials have indicated that their equipment levels will be adequate.

Liberty Township, which maintains over 39 miles of Township roadways, has the largest complement of maintenance equipment in the Planning Area. They own four trucks (each with a snowplow attachment), a back hoe, a bucket loader, a patcher/paver; and two mower/tractors. The existing equipment is adequate for their current needs, according to Township officials. The Liberty Township Building in Mooresburg is approximately 25 years old and sits on 1 ½ acres of land. The structure remains in good condition.

Limestone Township owns approximately 1 ½ acres in the Village of California. This land was purchased from the School Board after school consolidation. The property includes a baseball field and basketball court. These are maintained by Township residents associated with local sports teams. The Township Building is a partially-heated, pole-type building sitting on approximately 2 acres of land in Limestoneville. The Township has recently been considering the addition of some office space to the Building. Limestone Township's road equipment consists of two trucks (one is nearly 25 years old and functions as a back-up), a new 1991 tractor with mower, and an older motor grader. Their road-working equipment is adequate for their present needs.

West Hemlock Township owns a small building located along SR 2007 south of the Village of Columbia Hill, which was formerly known as Long's Church. The structure is situated on approximately 1 1/3 acres of land. West Hemlock Township has only 10 ½ miles of municipal roadways and consequently needs much less road working equipment than the other Townships in the Planning Area. West Hemlock Township owns one truck with a snowplow attachment, a stone rake, and a cinder spreader.

B. POLICE AND FIRE PROTECTION

1. Police Protection

No local or municipal police protection is available in any of the Planning Area Townships, although both Danville Borough and Mahoning Township in Montour County employ community police forces. Residents of Anthony, Derry, Liberty, Limestone and West Hemlock Townships rely on the PA State Police forces. Residents of Anthony, Derry, Liberty, Limestone and West Hemlock Townships rely on the PA State Police from the Milton Barracks to provide police service. (See also Table 31, in Sub-part 3 of this Section, for details regarding police incident responses in the Planning Area.)

2. Fire Protection

Local Volunteer Fire Companies provide fire protection for the Planning Area Townships. Liberty and Limestone Townships have instituted specific fire tax millages to support the companies providing this service in their areas, but the local volunteer fire departments must rely on contributions from the other municipalities and individuals they serve. The Boards of Supervisors in Anthony, Derry, and West Hemlock Townships make voluntary contributions to the appropriate local fire company, or companies, annually. (See Table 27 for an itemization of the expenditures made for fire protection from 1989 to 1991.)

Two of the municipalities in the Planning Area host volunteer fire companies. The Washingtonville Fire Company is located immediately north of the Borough of Washingtonville in Derry Township and the Liberty Township Fire Company is located in the Village of Mooresburg in Liberty Township. As host municipalities, Derry and Liberty Township are responsible for workmen's compensation insurance for their respective fire companies. Until the mid-1980's, Derry Township paid the total workmen's compensation cost for the Washingtonville company. Now, Anthony and Limestone Townships contribute payments to Derry Township to offset these annual insurance costs. In addition, the Boards of Supervisors of Anthony, Derry, Limestone, West Hemlock Townships and the Washingtonville Borough Council contribute annually to help off-set the operating expenses of the company. The Washingtonville Fire Company also individually solicits nearby Liberty Township residents for contributions under an agreement with the Liberty Volunteer Fire Company.

Anthony and Limestone Townships also contribute to the Turbotville Volunteer Fire Company, as well as to the Washingtonville Company. West Hemlock Township, which has the most access, challenges because of its terrain and road configuration, makes contributions to three fire companies—Washingtonville, Valley Township and Buckhorn—to ensure coverage.

In general, according to Fire Chief Roberts of the Washingtonville Company, grass and woodland fires occur much more frequently than structure fires in the Planning Area. According to Chief Roberts, structural fires have decreased as area residents have become more educated about the dangers of chimney fires caused by wood burning stoves. The number of grass and woodland fires in the Planning Area is directly related to the amount of precipitation received each spring. Since the spring of 1992 was fairly wet, there were relatively fewer calls for fire assistance within the Washingtonville response area during the remainder of this year.

Fires in local industries have been the most costly. The recent Strick fire resulted in approximately \$1 million in damages according to Chief Roberts. Fortunately most large plants have fire extinguishers on site. The PP&L Montour Plant, for example, has its own fire brigade on each shift within the plant.

The Washingtonville Volunteer Fire Company Building, located in Derry Township, was built on donated land in the early 1950's. The Company Building was recently renovated and consequently no expensive building repairs are expected in the near future. The Company owns a 1972 pumper engine which was purchased new and can pump up to 750 gallons per minute. They have a 1969 1,500 gallon water tanker, also purchased new, and a 1985 brush truck for woods and grass fires. The brush truck is a four wheel drive pick-up which was purchased used. The Fire Company estimates they will need to replace the pumper engine in approximately 5 years. This will be a major purchase costing approximately \$100,000 - \$150,000.

The Washingtonville Fire Company has informal mutual aid agreements with Liberty, Danville, and all other Montour County Fire Companies as well as Turbotville, Milton, McEwensville, and Millville Fire Companies.

The Liberty Township Volunteer Fire Company is equipped with one engine pumper, one 2,000 gallon water tanker, and a brush truck. The engine is 17 years old and they expect to replace it by the end of 1993. The Fire Hall sits on land purchased from the Township Supervisors in the Village of Mooresburg. The shell of the pole-type building was erected 10 years ago and fire company members completed the interior. The building remains in excellent condition. The company has mutual aid agreements with Washingtonville, Valley Township and Pottsgrove Fire Companies. In 1992, the number of calls for assistance was higher than previous years according to Fire Chief Rine.

As previously mentioned, Anthony and Limestone Townships contribute to the Turbotville Volunteer Fire Company for fire protection, in addition to the Washingtonville Company. The Turbotville Fire Company is equipped at approximately the same level as the Washingtonville and Liberty Township Companies for fire fighting. They have one engine, one 2,600 gallon tanker, and structural and vehicular rescue apparatus. The Turbotville Company also provides ambulance service, a service not provided by any of the Planning Area Companies because of the prohibitive expense.

West Hemlock Township has first response from Washingtonville and Valley Township and also receives fire protection to a lesser extent from the Buckhorn Fire Company. The West Hemlock Township Supervisors contribute primarily to the Washingtonville and Valley Township Fire Companies, with a lesser amount being provided to the Buckhorn Volunteers.

The reciprocal agreements between Fire Companies within the Planning Area and Fire Companies outside the Planning Area bring a full complement of equipment and fire fighters to any major structural or woodland fire. Turbotville and other nearby fire companies can provide additional water tankers which is key when fighting fires in rural areas. Water tankers can be refilled from hydrants at the PP&L plant and from numerous farm ponds located throughout the Planning Area.

The County's Department of Emergency Services reports response times in the northern end of the Planning Area to be approximately 10-15 minutes. These are the longest response times reported in the Planning Area. The Director of the Emergency Services Department considers response times of this length adequate for almost all incidents. (See also Sub-part 3 below for additional information regarding emergency dispatch and response times.)

3. Emergency Dispatch and Response

Emergency 911 calling services are not currently available in the Planning Area, although the Montour County Commissioners have recently been considering implementing such a system or the private HELP system of address-coding in the County. They are currently weighing the two options. While both Chief Roberts, of the Washingtonville Fire Company, and Chief Rine, of the Liberty Township Fire Company, both favor the 911 system, they are concerned about the County's ability to finance such a project. As a result, they support initiating the HELP system, which would be at no cost to the County, if a 911 system can not be financed in the near future. Either system would simplify locating rural addresses for police and fire personnel (including mutual aid responders) in emergency situations, thereby reducing overall response times.

Activating a 911 emergency calling system would likely involve a high initial cost, since each road in the County would have to be named, each house would have to be numbered, and detailed maps illustrating this information would need to be prepared for dispatching purposes. The HELP system, on the other hand, a computerized address system, would assign a 5-digit identification number to each residence in the County and would be paid for by private citizens subscribing to the system. Although most emergency personnel would prefer a 911 system, the HELP system has proven to be very helpful in other rural counties. After initial set-up costs however, a 911 system could generate income for the County and could help support itself. State law allows counties to levy a monthly service charge on all telephone subscribers within their jurisdictions. Up to 60% of this monthly 911 service charge could be used to support emergency dispatching services. This could generate as much as \$20,000 annually in Montour County. (Average service charges in counties utilizing 911 systems in 1992 was \$1.50 per month, per subscriber.)

The Montour County Department of Emergency Services currently dispatches police and fire personnel centrally from 275-1911, the 911 equivalent in the Planning Area. Calls for Police assistance are routed to the State Police Barracks in Milton.

According to the State Police there has been an increase in the number of calls received from the Planning Area over the past 15 years as the population of the municipalities has grown. A summary of the incidents involving the police in the Study Area in 1992 shows that there were a total of 259 calls for service during that year. Fifty-three of the calls were traffic accidents and the remaining 206 involved other types of incidents, including general disturbances and criminal activities. (Hit and run accidents or accidents involving drunk driving were counted among the non-traffic incidents because of the crimes involved.)

Table 31 illustrates the number and type of incidents that occurred in each of the Planning Area Townships in 1992.

Table 31

**Planning Area Townships
State Police Incidents – 1992**

	Total Incidents	Traffic Incidents	Non-Traffic Incidents*
Anthony Township	79	15	64
Derry Township	83	18	65
Liberty Township	32	5	27
Limestone Township	41	7	34
West Hemlock Township	24	8	16
TOTALS	259	53	206

* Includes hit and run and drunk driving incidents.

Source: PA State Police, 1992 Incident Report Files, January 1993;
Summary calculations by Landplan, Inc., June 1993.

C. EMERGENCY MEDICAL SERVICES

All of Montour County falls within the 200-mile radius of the Geisinger's Life Flight Emergency Helicopter Service which provides transport to the Geisinger Trauma Center. Geisinger has two helicopters and can fly in most weather conditions. They can be at any accident scene with adequate terrain for landing very quickly. For less catastrophic events, ambulance service is available from the Danville and Turbotville Ambulance Companies.

Although the Washingtonville Fire Company has considered initiating ambulance service in the past, there have not been enough calls in their area of operation to justify the expenses involved.

Ambulance service for Anthony, Derry, Liberty, Limestone and West Hemlock Townships is dispatched by either the Montour County Emergency Services Department from Danville or by the Union County Emergency Services Department in Lewisburg for Turbotville. The Danville Ambulance Company services the entire county, although residents can request the Turbotville Ambulance and dispatchers will route the request to the Union County Dispatchers.

Turbotville has only one ambulance. The Danville Ambulance Company, on the other hand, has four Modular Ambulances and 24-hour emergency medical personnel on staff. The emergency medical personnel include five paid staff members, with the balance made up of volunteers. All of the company's paramedics are volunteers. They provide back-up for Geisinger's Emergency Life Flight unit and have reciprocal agreements with Turbotville, Northumberland and Bloomsburg Ambulance Companies. Most of the patients are transported to Geisinger Medical Center, but patients have the option to go to any area hospital.

The Danville Ambulance Company supports itself through its annual September Subscription Drive. They attempt to solicit each household in Montour County and send out approximately 6-8,000 notices. Response to this solicitation is approximately 50%. A budget is then developed based on subscription income. Additional income is however generated by billing non-subscribers for ambulance services as they are provided.

The Danville Company has plans to re-chassis one of its ambulances in the near future which could result in some major expense. The company rarely uses all of its ambulances at any one time and is not currently lacking for volunteers. The company could handle more calls if necessary.

D. HEALTH CARE

1. Geisinger Health Care System

The Geisinger Health Care System, headquartered in Danville, provides comprehensive health care throughout northeastern and central Pennsylvania and employment for almost 7,500 persons. The Geisinger Medical Center in Danville offers a full range of diagnostic and medical treatment facilities. The Center has 577 beds and functions as a tertiary care referral center offering medical services in at least 65 specialties and sub-specialties, including emergency medicine, cardiovascular surgery, and newborn intensive care. The Medical Center also houses a children's hospital center, in addition to centers for cancer, heart, kidney, neurosciences, and trauma cases. This facility has also been designated as a level I Regional Resource Trauma Center, based on its provision of comprehensive trauma care 24 hours a day and its conduct of outreach, educational and research programs in trauma care. The Center currently employs 3,944 people from Montour and surrounding Counties. During the fiscal year which ended in June 1991, the Medical Center handled over 20,000 hospital admissions and almost 1,200 births.

In addition to the Medical Center in Danville, the Geisinger System also includes the Geisinger Clinic, a group of nearly 500 physicians who provide multi-specialty health care throughout the System's region. While

approximately half of the physicians are based at the Medical Center, the remainder is based at numerous community family health centers throughout the territory. All of the physicians however have access to hundreds of support services provided by the Geisinger system. Medical group locations in the immediate area include Bloomsburg, Catawissa, Danville, Lewisburg, Milton, Muncy, Selinsgrove, and Sunbury.

The Geisinger Wyoming Valley Medical Center is a 230-bed secondary referral center serving the eastern portion of Geisinger's system. This facility cares for patients in the Greater Wyoming Valley and western Pocono region, providing comprehensive maternity and pediatric programs, five medical/surgical units and a complete emergency department. It also offers an extensive community health education program.

Marworth, an alcohol and chemical detoxification and rehabilitation program, with a 77-bed facility near Scranton and a 56-bed facility in Shawnee-on-the-Delaware, is also part of the Geisinger Health Care System. Both of these on-site treatment programs address the physical, social, psychological, and family issues related to dependency and recovery and provide education and counseling for family members.

2. Danville State Hospital

The Danville State Hospital, also in Montour County, is a large psychiatric institution which covers over 500 acres in Mahoning Township. Much of the acreage is farmland purchased when the hospital was growing its own food and providing therapeutic labor for resident patients. Now the farmland is leased to area growers. The total resident patient population in December 1992 was 450, including 140 residents in the hospital's long term care facility.

3. Other Hospitals

There are several other hospitals accessible to Planning Area residents. To the north, in Lycoming County, are the Muncy Valley Hospital, in Muncy Borough, which is affiliated with Divine Providence Hospital in the Williamsport area, and the Williamsport Hospital and Medical Center. Also nearby are the Bloomsburg Hospital and Berwick Hospital Center in Columbia County and the Evangelical Hospital in Lewisburg, Union County.

4. Nursing Homes

There are 312 licensed nursing home beds in Montour County in addition to the 143 long term care beds at the Danville State Hospital. There are two private Nursing Homes, the Gold Star Nursing Home and the

Grandview Health Home, providing a total of 252 beds, and one church-owned nursing home, the Maria Joseph Manor, which has 60 licensed beds.

F. SOCIAL SERVICES

A variety of social services are available to residents of the Planning Area. Special-needs populations, including the elderly, handicapped persons, and children requiring help, can turn to a number of agencies based in Montour County.

Montour County Children and Youth Services operates foster care and protective service programs for children and investigates child abuse within the County. The Child Abuse Hotline, based in Harrisburg, Pennsylvania, provides details of suspected abuse to the appropriate local agencies.

Senior citizens within the Planning Area can receive assistance from the Area Agency on Aging, Columbia-Montour Home Health Services, and the Social Security Administration, all based in Bloomsburg, and Meals on Wheels based in Danville. There are several senior citizens centers, including one in Washingtonville, one in Danville, and one in Millville. The Green Thumb Agency, based in Mechanicsburg, also provides employment for low income senior citizens in rural areas.

Persons and families in financial need can receive assistance from the Danville-based Montour County Board of Assistance which offers public assistance, food stamps, medical coverage, social services, energy assistance for low income home owners, assistance for the unemployed and agency referrals. The Red Cross and Salvation Army also extend help to those in need.

Drug and alcohol abusers and their families can find help from a variety of sources, including Alcoholics Anonymous, in Hazleton and Sunbury; the Bloomsburg Hospital Detox Clinic in Bloomsburg; the Family Counseling and Mental Health Clinic in Danville; and the Montour County Drug and Alcohol Clinic in Danville.

The Bureau of Vocational Rehabilitation, through its Williamsport Office, assists physically or emotionally impaired people to find jobs. They also provide counseling, job training and vocational assessment.

The Montour County Housing Authority assists low income families living in Montour County with rental payments and operates 115 units of public housing for families and the elderly. In addition, the Farmers Home Administration, located in Bloomsburg, provides housing assistance in rural areas.

Domestic issues are handled by the Montour County Domestic Relations Department which handles and enforces support and alimony payment orders. There is also a Women's Center in Bloomsburg for victims of domestic violence. The center provides emergency shelter for women and children.

The County Veterans Affairs Office in Danville assists veterans and their widows and children with applications for service-connected benefits. The office also provides emergency service-connected benefits. The office also provides emergency assistance for veterans who suffer a drop in income.

A variety of other services for citizens confronting problems related to mental health or mental retardation; personal problems; or pregnancy concerns are also available. The agencies and offices listed in this section and others not named can be found in the blue pages of local telephone directories.

At the local level in the Planning Area, there are many active rural churches. Throughout Montour County church membership and affiliation is high and this appears to be true in the Planning Area as well. There are over 30 churches in the County with nearly 11,000 parishioners.

G. EDUCATIONAL FACILITIES (PUBLIC AND PRIVATE)

1. Public Schools

In the early 1940's, many of the one-room schools in the Planning Area were merged into larger consolidated educational units. By the mid-1950's, the Anthony and limestone Consolidated Schools became part of the Warrior Run School District, as a system of even larger districts was being organized. Liberty, Derry and West Hemlock Townships were included in the Danville Area School District.

In the fall of 1992, the Danville Area School District had a total student population of 2,841. This represented an enrollment approximately 10% higher than the average enrollment in the District between 1985 and 1990. Despite the increase in the number of students, the district's physical plant still has excess capacity. Several of the 1st and 2nd grade classes in the district though are at the maximum of 30 students. This number of students has not affected the quality of the school district, however. Each year the Danville Area Schools have several tuition students, which is unusual for a public school. Currently two children from Millville, one from Bloomsburg, and one from Shamokin are paying tuition in excess of \$3,500 annually to attend the Danville Area Schools.

Elementary students from Derry and West Hemlock Townships attend the Danville Elementary School, enrollment 459, in Danville. Students from Liberty Township for the most part attend the Liberty-Valley Elementary School, enrollment 339. During the fall of 1992 however, several of the primary grade classes at Liberty-Valley had reached the maximum of 30 students and it became necessary to route some of the new primary students to Danville Elementary. All middle school and high school students from

Derry, Liberty and West Hemlock Townships attend the Danville Middle School, enrollment 772, and the Danville Area High School, enrollment 739.

Anthony and Limestone Township students attend the Turbotville Elementary School, the Warrior Run Middle School and the Warrior Run High School all in Turbotville. With the addition of several new classrooms during the 1991-1992 school year, the Turbotville Elementary School is not experiencing “full” primary grade classes. The Warrior Run School District has also found a great deal of their growth in elementary school enrollments at the more suburban Watsontown Elementary School.

2. Private Schools

Private schools within the Planning area and accessible to residents of the Planning Area include several Amish, Christian and Parochial Schools. The Beaver Run Amish School (formerly the White Hall one-room School House) in Anthony Township; the Chillisquaque Amish School in Derry Township, the Schuyler Amish School in Limestone Township, and the County Line Amish School in Madison Township, Columbia County, provide schooling through the 8th grade level. (Amish schooling ends at the eight grade level or upon the attainment of a specified level of knowledge.) Christian schools which also draw some students from the Planning Area include Watsontown, Bloomsburg, Sunbury, Northumberland, Meadowview and Meadowbrook Christian. The Greenwood Friends School in Millville, Columbia County, and the Maranatha Mennonite School in Lewis Township, Northumberland County may also draw some students from the Planning Area.

3. Vocational-Technical Education

The Columbia-Montour Area Vocational-Technical School, located in South Centre Township east of Bloomsburg in Columbia County, offers vocational-technical training to area high school students. The school offers Data Processing, Drafting, and Electronics as three technical fields of study, as well as fifteen vocational courses, including Auto Body Repair, Auto Mechanics, Basic Foods, Building Trades, Carpentry and Construction, Cosmetology, Electrical Occupations, Food Preparation, Graphic Arts, Health Occupations, Horticulture/Floriculture, Machine Shop, Marketing and Distributive Education, Plumbing and Heating, and Welding.

4. Libraries

There are several libraries accessible to Planning Area residents. The Thomas Beaver Free Library in Danville is part of the Pennsylvania Access system and users can request books from any library in the state via this system. There are also public libraries in Bloomsburg, Berwick and the

Andruss Library at Bloomsburg University, as well as the Montgomery House Public Library in McEwensville.

5. Post-Secondary Educational Opportunities

Higher education and continuing education opportunities are also available to the residents of Anthony, Derry, Liberty, Limestone and West Hemlock Townships. Bloomsburg University with a 1991 enrollment of over 7,000 students offers 65 undergraduate and 20 graduate programs, as well as life-long education opportunities through their School of Extended Programs. Bloomsburg University also offers off-campus credit courses at the Geisinger Medical Center in Danville, Shamokin High School, and Shikellamy High School in Sunbury and in Milton. Many of their courses are designed to be convenient for non-traditional students.

Other institutions of higher learning accessible to residents of the Planning Area include the Danville Area School District Practical Nursing Campus near Washingtonville, Penn College and Lycoming College in Williamsport, Lock Haven University in Lock Haven, Bucknell University in Lewisburg, and Susquehanna University in Selinsgrove.

H. PARKS, RECREATIONAL ACTIVITIES & CULTURAL FACILITIES

P.P. & L.'s Montour Preserve, located in Anthony Township, provides numerous outdoor recreational opportunities. P.P. & L. owns almost 5,000 acres in Anthony and Derry Townships. This includes approximately 4,000 acres of land which are available for public hunting through a cooperative farm-game project with tenant farmers and the PA Game Commission. The Preserve itself, which does not allow hunting, totals 966 acres, including the 165-acre Lake Chillisquaque, which was created by P.P. & L. to provide an emergency cooling water supply for its 1.5-million kilowatt power plant. The Preserve offers picnicking, hiking, fishing, boating and bird-watching opportunities. The Lake has become a popular stopping point for migrating birds and there are two blinds, or observatory buildings, available to the public for watching the water fowl. The Preserve has 13 1/3 miles of trails, including a 1/3 mile Braille trail for the visually-impaired. The Preserve also includes a fossil pit where public fossil collection is permitted. Other educational programs and wildlife exhibitions, as well as guided trail walks and programs combining entertainment with environmental education are offered at the Preserve.

Other recreational facilities can be found in the Village of Exchange in Anthony Township. This community's recreational area includes the Exchange Pool, a public swimming pool, picnic pavilions, ball-playing fields, as well as a community building. Derry and Limestone Townships also have

one ball field each. In addition to the baseball field, facilities at the California Grange (#941) in Limestone Township also include a picnic pavilion and a basketball court. The semi-public Danville Recreation Center in the Borough of Danville offers a variety of in-door sports programs, including an Olympic-size pool, and Sunnybrook Park, a private, non-profit recreational area operated by the Danville Area Playground Association, located just off PA Route 642 in Valley Township, provides space for numerous outdoor recreational activities.

The North Montour Sportsmen's Association, located adjacent to the Montour Preserve near the Village of White Hall, is a private association which owns approximately 113 acres in Anthony Township. Their property is available to members for trap shooting purposes. The Milton Fish and Gun Association, which owns roughly 150 acres along Tower Road in Liberty Township, is also available for use only by its members. In addition, a small portion of State Game Lands No. 115 is located in eastern part of the Montour Ridge area of Liberty Township. Although the majority of this Game Commission tract is situated in Point Township, Northumberland County, the area is still available for use by Planning Area residents.

Hunting and fishing are popular throughout the Planning Area. Montour County's 1990 deer harvest totaled 1,312. According to PA Game Commission records, there were 407 antlered deer and 905 antlerless deer taken in the County that year. In addition, there is hunting for bear, turkey and small game within or near the Planning Area.

The 180-acre Liberty Valley Country Club, located along PA Route 642 in Liberty Township, offers an 18-hole golf course and driving range for its members on gently rolling, partially-wooded terrain. Lesson clinics are periodically available for the public, as is use of the driving range.

There are many parks and campgrounds which can be easily accessed from the Planning Area. Outdoor recreational opportunities include Ricketts Glen State Park and Council Cup, Evansville Lake and Ber-Vaughn Park in Berwick and Town Park in Bloomsburg. Camping facilities can be found at Turner's High View, Diehl's Camping Resort, and Indian Head Recreational Campground in Bloomsburg; Ideal Park and Springbrook Campground in Catawissa; Shady Rest Campgrounds in Millville; Shangri-La on the Creek in Milton; Fantasy Island Campground in Sunbury; and Moyer's Grove Campground in Wapwallopen.

There are also several historical sites worth visiting within easy driving distance of the Planning Area. Several spots offer insights into the mining heritage of the region. The Pioneer Tunnel in Ashland offers an educational tour through an actual coal mine, as well as rides on a 1920's vintage steam locomotive, and the Museum of Anthracite Mining is located nearby. Eckleys

Miners' Village near Freeland is a living museum of an actual mining village. Visitors can see and explore the houses, churches and businesses as they were in the 1800's.

Knoebels Amusement Resort in Elysburg, a 500-acre complex which includes a campground, a large roller coaster, 35 rides, a giant water plume and pool, also offers recreational opportunities.

The Montour/DeLong Fair is also held each year during the month of August at the DeLong Fairgrounds located in Limestone/Liberty Townships, just west of Washingtonville Borough. Good fun, food and family entertainment attract many County residents and visitors to this annual event.

CHAPTER 6.

PUBLIC UTILITIES

A. WATER SUPPLY

According to the “Needs Assessment Forum” for Montour County, sponsored by the Montour County Township Council of Governments and Montour County Cooperative Extension, slightly over 50% of households in Montour County rely on public water systems, while the remaining households rely on wells or springs. Table 32 presents a breakdown of the types of water supplies in the County by number and percent of households. The Danville and Mahoning Township Water Companies supply public water to households located in the more densely populated sections of the County, i.e. Danville Borough and Mahoning Township, while the entire Planning Area Borough and Mahoning Township, while the entire Planning Area relies on private water supplies from local ground water or springs. Although there have been some discussions regarding extending public water into portions of Valley Township, it is highly unlikely that such service will ever be available in the Planning Area Townships.

Table 32

**Montour County
Water Supply Source by Household – 1991**

Public Systems	3,058	(51.6%)
Individual Drilled Wells	2,604	(43.9%)
Individual Dug Wells	164	(2.8%)
Others	102	(1.7%)

Source: A Summary of the “Needs Assessment Forum” for Montour County, sponsored by the Montour County Township COG and Montour County Cooperative Extension, January 7, 1992.

Underlying rock formations within Anthony, Derry, Liberty, Limestone and West Hemlock Townships are the major factors which determine the amount of water expected, the depth of area wells and the quality of the water extracted. The 1968 Montour County Comprehensive Sewer and Water Plan indicate that the majority of ground water in the County comes from bedrock. While sandstone and shale are often poor sources of ground water because of their porous characteristics, the rock layers in the County have shifted sufficiently over time to create joints which enable water to flow more freely.

Drilling for water in the limestone formations which occur frequently in the Planning Area can be somewhat trickier. Water in limestone occurs chiefly in solution channels. The success of a well drilled into Limestone is often times a hit or miss proposition. Fairly strong wells result from drilling into one or more solution channels, while a weak well or dry hole can result if no solution channels are reached. In general most wells drilled into the bedrock in the Planning Area and Montour County as a whole yield water of good quality.

Several rock configurations occur within the Planning Area. A general overview of the major rock formations within the Planning Area, their relative location and respective well yields follow.

Portage – Hamilton Group – The Portage group crops out along the northern section of the Planning Area, Anthony Township for the most part. It consists of numerous thin bedded sandstones in shale beds which offer adequate domestic water supplies. The water well output ranges from 3-8 gallons per minute, with some sections yielding even more water. Well depths range from 18-145 feet. The water extracted is hard and in some areas, contains high quantities of sulphate.

Oriskany Sandstone – The Oriskany Sandstone crops out as a narrow band at several places, mainly in Limestone Township and the western portion of Derry Township, and as a band running along both sides of Montour Ridge. In general this formation can not support a large number of domestic wells. There are thin beds of cherty limestone in the sandstone which cause the water to be hard.

Helderberg Limestone Formation – The Helderberg formation runs in narrow strips parallel to the Oriskany Sandstone found in the Planning Area. Wells range in depth from 48-293 feet and are reported to yield 5-25 gallons per minute. As stated earlier, limestone is the most uncertain type of rock encountered in this region in that it can yield large quantities of water if solution channels are encountered, but otherwise usually yields small quantities. Water extracted from this formation is moderately hard.

Cayuga Group – The Cayuga Groups crops out in the west-central portion of the County, directly west of Washingtonville Borough. It is the chief constituent of the Montour Ridge which crosses the entire breadth of the County north of Danville. The strata consist principally of alternate beds of shale and limestone and form the only typical limestone region in northeastern Pennsylvania. Due to its limestone origin, the ground water has a somewhat milky appearance and is very hard. Domestic wells ending the Cayuga limestone range in depth from 24-136 feet and are reported to yield from 1-15 gallons per minute. Industrial wells range in depth from 160-600 feet and yield from 10 to 150 gallons per minute.

Catskill Continental Group – This formation crops out along the eastern boundary of West Hemlock Township. The formation is relatively unimportant as a water source although it does supply a few shallow drilled wells with an adequate quantity of good water. The Glacial drift, located adjacent to the Susquehanna River in Montour County, overlays bedrock of the Catskill Continental Group. The formations near Danville are deep; wells penetrate about 60 feet of clay and hardpan before coming in contact with rock. Though the gravel and sand beds overlying the bedrock contain appreciable amounts of good quality water, they are usually cased off in favor of ending the well into the more favorable bedrock. The gravel bed could be utilized as a source of ground water, but screening and straining of the water would be necessary.

Source: Montour County Comprehensive Sewer and Water Plan, Clifton E. Rodgers and Associates, 1968.

Unfortunately, the quality of ground water in the region has been compromised in some areas and is questionable in others. For one thing, the recently-conducted Needs Assessment Forum indicated that giardia cysts have been discovered in the public water supplies of some of the communities surrounding Montour County. And, numerous cases have documented contamination of private wells from malfunctioning sub-surface sewage disposal systems and from the improper use of pesticides and agricultural chemicals. Other home owners have experienced high sulfur content in their water supplies. Major concerns are that these and other problems associated with the local water supply will only increase with additional development in the area.

Further concerns have been expressed by area residents regarding the groundwater clean-up project to be undertaken at the Wire Rope Plant in Valley Township (a Superfund site). They are apprehensive that this major operation could effect the depth of the water table of a sizeable area in the vicinity of the plant over the long term, since water extracted from the site is to be pumped into the Susquehanna River following treatment. Since the speed and direction of the flow of groundwater can often be difficult to determine, rigorous testing will be needed to determine the overall effect and completeness of the clean-up effort. The extension of public water supplies into areas in close proximity of the plant should also be considered as a means of alleviating possible water contamination or quantity problems in these areas of Valley Township.

B. SEWAGE DISPOSAL/SANITARY SEWER FACILITIES

Although a small number of households in the Planning Area are served by the Washingtonville Sewage Treatment Plant, most utilize on-site, sub-surface

sewage disposal systems. Table 33 provides a breakdown of the types of sewage disposal used throughout Montour County.

Table 33

**Montour County
Sewage Waste Treatment by Household – 1991**

Households on Public Sewer	3,285	(55.4%)
Households on Septic Systems	2,555	(43.1%)
Other	88	(1.3%)

Source: A Summary of the “Needs Assessment Forum” For Montour County, sponsored by the Montour County Township COG and Montour County Cooperative Extension, January 7, 1992.

The Washingtonville Municipal Sewer Authority operates a sewage treatment plant, located in Derry Township. According to the authority’s secretary, the plant serves approximately 16 customers in Limestone Township (along PA Route 254), 20 individual customers in Derry Township, and the Blue Springs Mobile Home Park in Derry Township. (In January of 1993, 101 mobile home customers were billed by the Authority.) Despite the plant’s location in Derry Township and the fact that it serves a few customers in Limestone Township, neither Township has any direct involvement with the operation or maintenance of the treatment plant. All easements, pipes, etc. situated outside of the Borough limits have been deeded to and are owned by the Authority.

According to Buchart-Horn, engineers for the Sewer Authority, the Washingtonville Sewage Treatment Plant has a 90,000 gallon per day flow capacity and is currently operating at an average of 44,000 gallons per day. Although, the plant is only operating at about 50% of its maximum flow capacity, the excess flow capacity cannot be fully utilized because of the plan’s high production of Biological Oxygen Demand units.

The BOD (Biological Oxygen Demand) level produced by the plant is presently at about 80% of the total DER-permitted allotment. (The plant has a 130 pounds-per-day BOD level and their total permitted allotment is 154 pounds-per-day.) Commercial establishments in the Washingtonville area contribute to the high level of solids in the wastewater treated by the plant. The plant cannot treat a significant amount of additional waste with a high level of solids, without exceeding their state-approved BOD allocation. If a separate holding tank was constructed and a full-time operator was hired, more waste could be accepted. The holding tank would allow solids to settle out of the wastewater making treatment more efficient.

Currently however, the expense of constructing a holding tank and hiring a full-time operator can not be justified.

According to the Montour County Municipal Solid Waste Management Plan the total volume of sewage and septage sludge produced by Montour County in 1990 was 158 tons.

The soils and groundwater conditions of an area can greatly influence the overall effectiveness or impose limitations on the functioning of sub-surface sewage disposal systems. While the details of each soil type found in the Planning Area are discussed in Chapter 9 of this Plan, information regarding their suitability for an impact on the effectiveness of individual sewage disposal systems will be addressed in this Section.

According to the Montour County Soil Survey, issued in April of 1985, all five of the different soil types located throughout the Planning Area present moderate to severe limitations for the functioning of sub-surface sewage systems. Specific soil types found in the area, their general location, and a brief description of their influence on on-site sewage disposal systems follows. (See also Map 3.)

The Weikert-Berks-Hartleton soils occupy virtually all of West Hemlock and Liberty Townships, the northern third of Anthony Township and the southern third of Derry Township, as well as the southwestern tip of Limestone Township. These soils present severe limitations for sub-surface sewage disposal systems because of their shallow depth to rock formations and because many of their soil groupings contain large stones.

The Watson-Alvira-Weikert Association, found in the southern two-thirds of Anthony Township and throughout most of the northern two-thirds of Derry Township, contains soils which present severe difficulties for the proper operation of on-site sewage disposal systems. These soils have a slow percolation rate and are generally poorly drained.

Hagerstown-Elliber-Edom soils occupy most of Limestone Township and present moderate to severe limitations for sewage disposal systems according to the County's Soil Survey. These soils are generally shallow and have a slow percolation rate when tested for the placement of sub-surface sewage systems.

The Holly-Monogahela-Basher Association are soils located in the floodplain areas of Beaver Run, Mud Creek and Chillisquaque Creek in Limestone, Derry and Liberty Townships. Because of the flooding, wetness and ponding associated with these soils, their effectiveness for use for on-site sewage disposal systems is severely restricted.

Buchanan-Laidig soils, located in the Montour Ridge area of Liberty Township, also severely limit the proper functioning of sub-surface sewage disposal systems. These soils can be affected by wetness, steep slopes and often perc slowly.

Source: U.S. Department of Agriculture, Soil Conservation Service, Montour County Soil Survey, April 1985.

As indicated above, all of the soils in the Planning Area will present limitations to the effective operation of sub-surface sewage disposal systems. On the other hand, most of the soils have been identified as being highly suitable for agricultural production. (A detailed discussion of farmland soils is presented in Chapter 9 of this document.) For this reason, all plans for residential development should be carefully reviewed and the merits or benefits of such development versus its impact on valuable farmland should be thoroughly weighed before plans are approved.

C. STORMWATER MANAGEMENT/STORM SEWER FACILITIES

There are currently no special storm water management facilities in the Planning Area Townships beyond the drainage swales and culverts installed to handle run-off adjacent to Township and State roads.

The Planning Area Townships, like all municipalities in the State of Pennsylvania, falls under the provisions of the PA Stormwater Management Act (Act 167) of 1978. The Act recognized that storm water runoff problems can only be effectively managed on a watershed basis. County governments were therefore assigned the responsibility for developing and adopting Watershed Management Plans for each watershed within their jurisdictional limits and for coordinating with neighboring counties where a watershed is located in more than one county. At the present time, the County Conservation District is awaiting final project approval from Department of Environmental Resources before preparing a Stormwater Management Plan for Mahoning Creek and its tributaries. They have preceded through Phase I of the project, have identified their Scope of Study, and are awaiting final approval of their grant application from DER. The Mahoning Creek watershed includes areas in West Hemlock, Derry and liberty Townships. The Conservation District expects to begin work on Phase II of the management plan in 1993.

D. SOLID WASTE MANAGEMENT

Montour County has adopted a Solid Waste Management Plan as required by Act 101 of 1988. Gannett Fleming, Inc. completed the Montour County Municipal Solid Waste Management Plan in September of 1990 and it was adopted by the County Commissioners on January 22, 1991. The County's Solid Waste Ordinance took effect in May of 1991. Each individual Township, as recommended by the Plan,

adopted their own solid waste ordinance as well. The main purpose of the solid waste ordinances is to control the flow of municipal waste. All municipal waste must be hauled to the Lycoming County Landfill in Brady Township, Lycoming County. Montour County has a contract with the Landfill guaranteeing disposal space until December 31, 2000.

The Montour County Municipal Solid Waste Management Plan includes estimates of the volume of municipal waste generated by each Township and the County as a whole. Table 34 outlines the Plan's estimates for 1990.

Table 34

**Planning Area Townships and Montour County
Estimated Volume of Solid Waste Generated – 1990**

	Estim. 1990 Pop.	Per Capita Waste Tons/Year	Gross Discards* Tons/Year	Gross Discards* Tons/Day
Anthony Township	1,270	.73	927	2.5
Derry Township	1,925	.73	1,405	3.8
Liberty Township	1,240	.73	905	2.5
Limestone Township	814	.73	594	1.6
West Hemlock Township	414	.73	302	.8
MONTOUR COUNTY	17,507	.73	12,780	35.0

* Includes recyclable materials.

Source: Montour County Municipal Solid Waste Management Plan, prepared by Gannett Fleming, Inc., September 1990.

The waste stream from the County's hospitals and other medical related businesses was also reviewed in the Solid Waste Plan. The Plan estimates that a total of 318 tons of infectious and chemotherapeutic waste are generated annually, primarily from Geisinger Medical Center and Danville State Hospital, which were responsible for 204 tons of waste in 1990. Additional infectious and chemotherapeutic wastes were generated by two dental offices and a funeral home in the County during 1990.

Act 101 required municipalities with populations greater than 10,000 to implement mandatory source separation and collection of recyclable materials by

September 26, 1990. Municipalities with populations between 5–10,000 were required to implement source separation and collection of recyclable materials by September 26, 1991. Danville was the only municipality in Montour County required to fulfill the source separation mandate. According to Borough officials, participation in their curbside collection recycling program reach 50% in 1992, a rate they would like to increase even higher in 1993.

Although not mandated by Act 101, the Solid Waste Plan assigns the County responsibility for developing education programs for recycling and drop-off collection; processing and marketing technical assistance; yard waste collection and composting technical assistance; and commercial and institutional recycling sector guidance for municipalities with populations less than 5,000. In addition, the Plan encourages the development of new markets for old newspaper, including animal bedding programs and cooperative regional markets.

The County's recycling coordinator, Wes Wertman, has begun to approach Townships in the Planning Area to establish recycling drop-off points. Thus far, only Anthony and West Hemlock Townships had began collecting recyclable materials by placing collection containers at their municipal buildings. Derry, Liberty and Limestone Townships had not established drop-off sites as of June 1993.

To date, the County's recycling program includes the collection of newspaper; clear, brown and green glass; plastic; aluminum; and tin. These items are collected monthly from most sites in the County, including Anthony and West Hemlock Townships in the Planning Area. The Recycling Coordinator hopes to establish additional sites within the Study Area municipalities before the end on 1993.

There is no centralized solid waste hauling service in the Planning Area. Private haulers are used throughout the Study Area Townships to pick up and dispose of municipal waste. Each Township licenses haulers separately. The County however expects to institute a centralized licensing system for their haulers in 1993 to verify the actual disposal site being utilized. Currently the County receives a \$1.00 per ton reimbursement from the Lycoming County Landfill for each ton of waste disposed there by Montour County haulers. This reimbursement is used by the county to enhance its recycling efforts, with 25% being distributed to municipalities participating in such recycling efforts.

Currently, the expected life span of the Lycoming County Landfill is 10-15 years if no additional land is purchased for expansion. All reductions in the waste stream coming into the landfill resulting from recycling of various materials will contribute to the extension of the life of this multi-County Landfill facility.

E. ELECTRIC AND NATURAL GAS UTILITIES

Pennsylvania Power and Light Company provides electric service to residents of the Planning Area. Service is quite adequate. P.P.&L. located a large steam-electric generation plant in Derry Township in 1968. The plant, which has two bituminous coal burning units, was completed in 1972 and still has excess capacity.

There is a limited amount of natural gas service in the Planning Area. Approximately 30 gas customers in Liberty and Limestone Township are served by tap-ins to P.G. & W.'s high pressure gas line running through Turbotville in Northumberland County to Lewisburg in Union County. This high pressure gas line could support service expansion in Limestone Township with the construction of a regulator station. A regulator station must however be supported by sufficient customer interest or additional hook-on fees must be paid to support the construction. According to a P.G. & W. engineer, the company will install only 100 feet of line per customer which usually prohibits expansion into most rural areas.

Table 35 outlines the type of home heating fuel used in each of the Planning Area Townships. Fuel oil and kerosene are the dominant fuel choices in Anthony, Derry, Liberty, Limestone and West Hemlock Townships, although the exact distribution of fuel use varies within the Planning Area.

Table 35

**Planning Area Townships and Montour County
Home Heating Fuel Characteristics – 1990**

	Utility Gas	Bottled, Tank or LP GAS	Elec.	Fuel Oil, Kerosene, Etc.	Other or None *
Anthony Township	-	3.0%	20.3%	48.5%	28.2%
Derry Township	-	14.5%	19.5%	54.4%	11.6%
Liberty Township	.4%	3.7%	21.1%	51.4%	23.3%
Limestone Township	2.6%	6.0%	24.4%	43.2%	23.7%
West Hemlock Township	-	1.4%	22.1%	47.9%	28.6%
MONTOUR COUNTY	20.2%	4.2%	28.2%	35.9%	11.5%

* Includes coal, wood and other types of fuel.

Source: U.S. Bureau of Census, 1990 Census of Population and Housing, Summary of Social, Economic, and Housing Characteristics, June 1992.

F. TELEPHONE SERVICE

The majority of Planning Area residents are served by Bell of Pennsylvania which operates in all five townships. (Engineers for the telephone company indicate they have as many as 12,000 access lines throughout Montour County.) Approximately 25 telephone subscribers in Limestone Township must take service from Alltel Telephone Company based in Muncy. Alltel does not have digital switching for Montour County customers, which means that a 911 system would not be possible. Digital switching is however in their plans for this area for 1995.

Bell of Pennsylvania engineers report that they have the capacity for 911 services with their current equipment. They additionally report that although the County does have some two-party line customers, these customers could easily be converted to single line service. The less than 100 party line customers in Montour County however apparently find their service adequate for their needs and budget and do not require the single line service available.

Table 36 outlines the percentage of households with and without telephones in each Planning Area Township and in Montour County as a whole. (It is likely that the sizeable Amish population within the Planning Area accounts for the comparably high percentage of households that have no telephone service.)

Table 36

**Planning Area Townships and Montour County
Housing Units With and Without Telephones – 1990**

	% With Telephone	% Without Telephone
Anthony Township	94.5%	5.5%
Derry Township	93.5%	6.5%
Liberty Township	99.2%	.8%
Limestone Township	95.1%	4.9%
West Hemlock Township	97.9%	2.1%
MONTOUR COUNTY	96.7%	3.3%

Source: U.S. Bureau of Census, 1990 Census of Population and Housing, Summary of Social, Economic, and Housing Characteristics, June 1992.

G. CABLE TELEVISION

Cable television is available in most portions of the Planning Area. Danville CATV, which serves Danville Borough, also provides service to the majority of the Study Area. Their service is somewhat limited though in the southeastern section of Liberty and the southern edge of Derry Townships. Commuter Cable East, located in Montoursville, also provides cable television services to portions of Anthony and Limestone Townships.

H. NEWSPAPER AND RADIO COVERAGE

While the Danville News is the only paper operating in Montour County, newspapers from nearby communities provide regional news to many local residents. The Sunbury Daily Item which has a total circulation of approximately 25,400 daily and 27,800 Sunday, estimates they have approximately 500 tube subscribers in the Planning Area. The Press Enterprise, in Bloomsburg, estimates a total of 2,300 subscriptions paid in Montour County in December of 1992, out of a total circulation of 22,000 in the same month. The Danville News has a total circulation of approximately 4,000 and estimates 1,060 tube customers in the County outside of Danville and Riverside. The Milton Standard, the Sunbury Daily Item and the Press Enterprise, as well as the Danville News all have newsstand outlets in Montour County for non-subscriber purchases.

There are no television stations based in the County and only one County radio station, WPGM, based in Danville. There are however several communication towers located in the Montour Ridge area of Liberty Township, including the tower for radio station WMLP in Milton, the tower for U.S. Cellular Telephone, the tower for Danville CATV, and the Montour County Communications Center for Danville CATV, and the Montour County Communications Center tower. Several connections have also been leased from the County's tower, including a connection for Geisinger Communications and one for RF Communications from Catawissa.

CHAPTER 7.

TRANSPORTATION

A. ROAD AND HIGHWAY TRANSPORTATION NETWORK

Rural areas without public transportation rely heavily on the automobile; therefore an adequate and well-maintained road network is essential. Further, appropriate provision for safe and efficient circulation of people and goods into and through a region directly contributes to the economic prosperity of an area and is a significant planning tool for guiding growth. The road and highway network in the Planning Area is an important support for existing development and will have an impact on the location and intensity of future growth.

The construction of new roads has become so expensive for municipal government that the future transportation network of the Planning Area will most likely follow established circulation patterns. The functional classifications for each road in the existing road network; the ownership and condition of each roadway; and the condition of the Township/County bridges carrying the cart ways over local streams will be reviewed in this part of Chapter 7. Subsequent sections will address traffic analysis; identify planned highway projects; and will look at some of the other types of transportation services available to Planning Area residents.

1. Functional Classifications

A highway's two major functions, moving traffic and providing access to specific sites, are basically incompatible. Classification designations for roads and highways are therefore aimed at separating roadways by function to reduce the conflicts. Such designations identify the roadway's function in the total circulation network within and outside the community. Each designation implies certain constraints (i.e. limiting access points) and/or postings (i.e. speed limits, road usage and directional signage) which should be imposed to maintain a reasonable balance between safe driving conditions, economical travel speed, and access to specific sites. The Table below provides a general description of the various types of road and highway functional classifications and some examples of each type of roadway in the Planning Area.

Table 37

Road Classification Descriptions

<u>Major Arterials</u>	Roadways that provide for movement of large volumes of through traffic between regions and major metropolitan areas. They generally serve long-distance interstate and intrastate traffic and are usually limited access highways or expressways. (Example – Interstate 80)
<u>Minor Arterials</u>	Roadways that provide for movement of large volumes of through traffic between centers of regional importance and provide connections between major arterials and collector roads. Access is also generally restricted. (Examples – PA Routes 54, 254 and 642)
<u>Major Collectors</u>	Roadways which provide for inter-community travel within the region and provide connections to the arterial network. Access to and from these routes is generally unrestricted. (Examples – State Routes 1002, Strawberry Ridge Road; SR 1007/2014, Diehl Road; and SR 3012, Mexico Road)
<u>Minor Collectors</u>	Roadways which connect local traffic generators, community facilities, major subdivisions and rural village centers. (Examples – Township Routes T-423, Sportsman Road; T-520, Camelton Hill Road; and T500, Indian Run Road)
<u>Local Streets</u>	Roadways which provide access to abutting properties and minor subdivisions. Traffic movement is generally slower along these roads. In the Planning Area, most Township roads serve as local streets. (Examples – majority of the Township road networks)

The following tables list all of the roadways in the Planning Area and their functional classifications. A separate classification table is provided for each Township, even though many of the roads in the Planning Area travel through more than one municipality.

Table 38 A

**Anthony Township
Roadway functional Classifications**

<u>ROADWAY NAME & NUMBER</u>	<u>MILEAGE</u>	<u>CLASSIFICATION</u>	
<u>State Routes</u>			
PA 44	6.0	Minor Arterial	
PA 54	2.1	Minor Arterial	
PA 587	.9	Major Collector	
SR 1002	.6	Major Collector	
SR 1003	6.7	Major Collector	
SR 1004	1.2	Minor Collector	
SR 1005	.9	Minor Collector	
SR 1006	4.6	Major Collector	
SR 1008	2.2	Minor Collector	
SR 1009	1.9	Minor Collector	
SR 1011 (PA 453)	3.2	Major Collector	
SR 4003	.3	Minor Collector	
SR 4008 (PA 586)	2.7	Major Collector	
<u>Township Roads</u>			
Amish Road	T-396	.50	Local Street
Betz Road	T-429	1.85	Minor Collector
Dennen Road	T-435/425	1.0	Local Street
Ellis Road	T-356	.1	Local Street
Fairview Church Rd.	T-360	1.41	Local Street
Gardner Road	T-417	.2	Local Street
Gearhart Hollow Road	T-441	1.0	Minor Collector
Hagerman Road	T-354	.6	Local Street
Larson Road	T-354	1.4	Local Street
Magargle Road	T-378	1.3	Local Street
McCormick Road	T-380	.9	Minor Collector
McMichael Road	T-378	.2	Local Street
Miller Road	T-423	.3	Minor Collector
Mingle Road	T-433	.9	Local Street
Moser Road	T-427	1.1	Local Street
Moyer Road	T-425	.1	Local Street
Mushroom Road	T-378	1.22	Local Street
PP&L Farm Road	T-443	.3	Local Street
Quick Road	T-358	.5	Local Street
Rishel Road	T-352	1.0	Minor Collector
School House Lane	T-425	.4	Local Street
Shetler Road	T-435	1.9	Minor Collector

Shupp Road	T-360	1.26	Local Street
Smith Road	T-380	.9	Local Street
Sneaky Hollow Road	T-439/400	1.2	Local Street
Sportsman Road	T-423	1.8	Minor Collector
Walburn Road	T-431/360	1.72	Local Street
Waltmyer Road	T-352	.83	Local Street
Watson Road	T-344	2.2	Local Street
Wolf Hollow Road	T-398	1.5	Local Street
Yeagle Road	T-437	2.5	Local Street

Source: PADOT Road Surveys and General Highway Map for Montour County and Northumberland County, 1990; and Field Survey by Landplan, Inc., January 1993.

Table 38 B

**Derry Township
Roadway Functional Classifications**

<u>ROADWAY NAME & NUMBER</u>		<u>MILEAGE</u>	<u>CLASSIFICATION</u>
<u>State Routes</u>			
PA 54	Continental Blvd.	4.2	Minor Arterial
PA 254	Washingtonville Road	3.3	Minor Arterial
SR 1002	Strawberry Ridge Road	3.9	Major Collector
SR 1003	P.P. & L. Road	1.9	Major Collector
SR 1007	Diehl Road	1.4	Major Collector
SR 1009	Greenleaf Drive	2.2	Major Collector
SR 1009	Stamm Road	.7	Major Collector
SR 2014	Diehl Road	3.5	Major Collector
SR 3010	Sechler Mill Road	.3	Minor Collector
SR 3012	Mexico Road	.1	Major Collector
<u>Township Roads</u>			
Blee Hill Road	T-510	2.80	Minor Collector
Brittain Road	T-413	.50	Local Street
Bush Road	T-348	.50	Local Street
Cameltown Hill Road	T-525	2.43	Minor Collector
Crawford Road	T-396	1.62	Minor Collector
Creek Road	T-411	1.27	Local Street
Cromley Drive	T-392	1.37	Local Street
Dead End Road	T-418	.11	Local Street
Degreen Road	T-417	1.35	Local Street
DeLong Road	T-407	1.29	Local Street

Dieffenbach Road	T-350/409	.19	Local Street
Fairview Road	T-407	.86	Local Street
Fossil Run Road	T-520	.76	Local Street
Gray Road	T-416	.94	Local Street
Hillside Road	T-385	3.20	Minor Collector
Indian Run Road	T-500	1.46	Minor Collector
McMichael Road	T-378	1.18	Minor Collector
Mill Road	T-415	.14	Local Street
Mowery Road	T-365	.10	Local Street
Roup Road	T-372	.35	Local Street
Rhoades Hill Road	T-387	1.35	Local Street
Shultz Road	T-394	.92	Local Street
Shed Road	T-376	.55	Local Street
Smith Road	T-384	1.14	Minor Collector
Spike Blue Hollow Road	T-390	.20	Local Street
Steffens Road	T-374	2.85	Minor Collector
Turtleback Road	T-419	.59	Local Street

Source: PADOT Road Surveys and General Highway Map for Montour County and Northumberland County, 1990; and Field Survey by Landplan, Inc., January 1993.

Table 38 C

**Liberty Township
Roadway Functional Classifications**

<u>ROADWAY NAME & NUMBER</u>		<u>MILEAGE</u>	<u>CLASSIFICATION</u>
<u>State Routes</u>			
Interstate 80		7.5	Major Arterial
PA Route 642		5.4	Minor Arterial
PA Route 45		3.3	Minor Arterial
SR 3003	Jackson School House	3.4	Major Collector
SR 3004	Pottsgrove Road	1.9	Major Collector
SR 3006	Stump Road	2.6	Minor Collector
SR 3007	Klondike Road	2.0	Minor Collector
SR 3008	West Valley Road	.5	Minor Collector
SR 3010	Sechler Mill Road	2.7	Minor Collector
SR 3012	Mexico Road	5.5	Major Collector
<u>Township Roads</u>			

Bald Top Road	T-330	2.93	Minor Collector
Beaver Run Road	T-318	1.08	Minor Collector
Boop Devel. Road	T-329	.30	Local Street
Bower Lane	T-323	.13	Local Street
Bridge Road	T-308	1.62	Minor Collector
Camp Road	T-337	1.5	Local Street
Center Road	T-306	2.0	Minor Collector
Chestnut Grove Rd.	T-334	.6	Local Street
Church Street	T-324	.23	Local Street
Danny's Road	T-312	.5	Local Street
Hagenbuch Loop	T-848	1.69	Minor Collector
Hilkert Road	T-367	2.0	Minor Collector
Jackson Road	T-318	1.96	Minor Collector
Keefer Mill Road	T-346	1.3	Local Street
Kelly's Dam Road (Creek Road)	T-324	1.5	Minor Collector
Knapp Road	T-361	.73	Local Street
Kriswell Road	T-346	.9	Local Street
Mauger Road	T-330	.84	Minor Collector
McCracken Road	T-843	.86	Minor Collector
Mooresburg Road	T-741	2.32	Minor Collector
(Mooresburg St.)	T-328	.13	Local Street
Mountain Road	T-302	1.5	Local Street
Mowrey Road	T-365	2.5	Minor Collector
Oak Grove Road	T-332	2.47	Minor Collector
R&H Avenue	T-387	.15	Local Street
Ridge Road	T-844	2.38	Minor Collector
School House Road	T-318	.61	Minor Collector
Smith Road	T-363	.8	Local Street
Starner Road	T-318	.52	Local Street
Starner Road	T-365	.9	Minor Collector
Tower Road	T-310	1.55	Local Street
VanSant Road	T-359	.8	Local Street
Voris Road	T-304	.8	Local Street

Source: PADOT Road Surveys and General Highway Map for Montour County and Northumberland County, 1990; and Field Survey by Landplan, Inc., January 1993.

Table 38 D

**Limestone Township
Roadway Functional Classifications**

<u>ROADWAY NAME & NUMBER</u>		<u>MILEAGE</u>	<u>CLASSIFICATION</u>
<u>State Routes</u>			
Route 54		.7	Minor Arterial
Route 254		4.4	Minor Arterial
SR 4001	County Line Road	4.2	Major Collector
SR 4002		.7	Minor Collector
SR 4003		4.6	Major Collector
SR 4004		2.3	Minor Collector
SR 4006		1.1	Minor Collector
SR 4008		.8	Minor Collector
<u>Township Roads</u>			
Beaver Run Road	T-316	.88	Minor Collector
Chapel Road	T-399	.6	Local Street
County Line Road	T-316	1.7	Minor Collector
Craig Road	T-403	1.0	Minor Collector
Fairview Road	T-407	1.85	Minor Collector
Gardner Road	T-417	1.0	Local Street
Hagenbuch Road	T-326	1.54	Minor Collector
Keefer Mill Road	T-346	.15	Local Street
Laidacker Road	T-401	2.0	
Marr Road	T-340	1.0	
Mill Road	T-328	.8	
Myer Road	T-403	.2	
Pfleegor Road	T-395	.86	
Quarry Road	T-395	.9	
Schuyler Road	T-346/417	1.78	
Shady Hill Road	T-403	1.0	
Smith Road	T-338	.52	
Stiles Road	T-344	.2	
Walter Road	T-342	1.0	
Ziegler Road	T-320	.6	

Source: PADOT Road Surveys and General Highway Map for Montour County and Northumberland County, 1990; and Field Survey by Landplan, Inc., January 1993.

Table 38 E

**West Hemlock Township
Roadway Functional Classifications**

<u>ROADWAY NAME & NUMBER</u>		<u>MILEAGE</u>	<u>CLASSIFICATION</u>
<u>State Routes</u>			
Interstate 80		1.0	Major Arterial
PA Route 642		1.9	Minor Arterial
SR 2007	Columbia Hill Road	3.8	Major Collector
SR 2012	Frosty Valley Road	1.1	Major Collector
SR 2014	Diehl Rd., Stine Rd., & Hedge Road	5.4	Major Collector
SR 2016		1.3	Major Collector
<u>Township Roads</u>			
Billhime Road	T-418/382	1.1	Local Street
County Line Road	T-412	1.2	Minor Collector
Gotschal Road	T-343	1.1	Minor Collector
Hartman Road	T-379	1.0	Minor Collector
Kashner Road	T-355/414	1.1	Local Street
Kitchen Road	T-389	1.1	Minor Collector
Robinson Road	T-416	.9	Minor Collector
Shultz Road	T-420	.51	Local Street
Styer Road	T-389	.7	Minor Collector
Welliver Road	T-379	.5	Local Street
Woodside Road	T-385	.7	Local Street
*	T-357	.1	Local Street (Abandoned?)
*	T-391	1.36	Local Street
* No road name found.			

Source: PADOT Road Surveys and General Highway Map for Montour County and Northumberland County, 1990; and Field Survey by Landplan, Inc., January 1993.

2. Ownership

Roadway ownership can be separated into two major classifications within the Planning Area; State-owned routes and local or Township-owned

roads. Routes designated “PA” or “SR” (State Route) are owned and maintained by the PA Department of Transportation. The individual Townships in the Planning Area are responsible for constructing, reconstructing and maintaining routes designated with a “T” within their municipalities. Table 39 provides a listing of the total miles of roads owned by each Township in the Planning Area, as well as an indication of the Liquid Fuels funds that each of the municipalities received from the State in 1992.

Table 39

**Planning Area Townships
Road Mileage & State Liquid Fuels Allocations – 1992**

<u>Township</u>	<u>Total Township Road Mileage</u>	<u>State Liquid Fuels Allocation</u>
Anthony	32.59 miles	\$54,442.79
Derry	29.52 miles	\$58,032.22
Liberty	39.32 miles	\$67,587.08
Limestone	21.60 miles	\$32,475.78
West Hemlock	10.50 miles	\$18,178.12

Source: PADOT Road Survey Forms; and Montour County Supervisors’ Association Annual Convention Program, 1992.

According to PADOT records, road ownership is almost evenly split between the State and the Townships in Anthony, Liberty, Limestone and West Hemlock Townships. Derry Township owns slightly more than half of their road network because of several recent turn backs. In Anthony Township, there are a total of 64.94 miles of roadways, 32.59 miles of which are owned by the Township. Liberty Township has the most miles of roadway in the Planning Area, with a total of 72.20 miles, 39.32 of which are Township-owned. In Limestone Township there are a total of 39.87 miles of road and the Township owns 21.60 miles. West Hemlock Township, which has the smallest road network, has a total of 21.53 miles of road and the Township owns 10.5 miles. Derry Township has a total of 48.83 miles of roadway and the Township owns approximately 60% of the network, or 29.52 miles.

Overall, there are 133.53 miles of Township-owned roadways in the Planning Area and 113.84 miles of State-owned routes, for total of 247.37 miles of roadways. There are also a few private roads in the Planning Area

which are owned and maintained by the individuals using them or by the landowners involved.

3. Physical Condition

An elevation of the Planning Area's roadway surface conditions was conducted by Landplan, Inc. in December of 1992 and January of 1993. (A copy of the rating criteria used to evaluate roadway conditions can be found in Appendix E of this Plan.) The surface conditions noted during the field work were then compared with PADOT roadway surveys at District 3-0 offices in Montoursville. (This comparison showed that while Derry Township roads had been surveyed by PADOT in 1989, Anthony, Liberty, Limestone and West Hemlock Township roads had not been surveyed by the State since 1978.) Tables 40 A-E present road surfaces and conditions for each road in the Planning Area Townships using the information gathered during the field survey and data available from PADOT.

Table 40 A

**Anthony Township
Roadway Surface Conditions**

<u>ROADWAY NAME & NUMBER</u>	<u>ROAD SURFACE</u>	<u>SURFACE CONDITION</u>	
<u>State Routes</u>			
PA 44	Bituminous	Good	
PA 54	Bituminous	Good	
SR 587	Bituminous	Good	
SR 1002	Bituminous	Good	
SR 1003	Bituminous	Fair to Good	
SR 1004	Bituminous	Good	
SR 1005	Bituminous	Fair to Good	
SR 1006	Bituminous	Fair to Good	
SR 1008	Bituminous	Good	
SR 1009	Bituminous	Fair to Good	
SR 1011 (PA 453)	Bituminous	Fair to Good	
SR 4003	Bituminous	Good	
SR 4008 (PA 586)	Bituminous	Fair to Good	
<u>Township Roads</u>			
Amish Road	T-396	Dirt	Poor
Betz Road	T-429	Gravel	Fair

Dennen Road	T-435/425	Dirt	Poor
Ellis Road	T-356	Gravel	Fair
Fairview Church Rd.	T-360	Bituminous/Gravel	Fair to Good
Gardner Road	T-417	Gravel	Fair to Good
Gearhart Hollow Road	T-441	Bituminous	Good
Hagerman Road	T-354	Gravel	Fair to Good
Larson Road	T-354	Bituminous	Fair to Good
Magargle Road	T-378	Gravel	Good
McCormick Road	T-380	Bituminous	Good
McMichael Road	T-378	Gravel	Fair
Miller Road	T-423	Bituminous	Good
Mingle Road	T-433	Dirt/Gravel	Fair
Moser Road	T-427	Bituminous	Fair to Good
Moyer Road	T-425	Gravel	Fair to Good
Mushroom Road	T-378	Dirt	Fair to Good
PP&L Farm Road	T-443	Gravel	Fair to Good
Quick Road	T-358	Dirt	Poor (Dead End)
Rishel Road	T-352	Bituminous/Gravel	Good
School House Lane	T-425	Gravel	Good
Shetler Road	T-435	Bituminous	Good
Shupp Road	T-360	Bituminous/Gravel	Fair
Smith Road	T-380	Gravel	Fair to Good
Sneaky Hollow Road	T-439/400	Gravel/Dirt	Poor
Sportsman Road	T-423	Bituminous	Good
Walburn Road	T-431	Gravel	Fair to Good
Waltmyer Road	T-352	Bituminous	Good
Watson Road	T-344	Bituminous/Gravel	Good to Fair
Wolf Hollow Road	T-398	Gravel/Dirt	Fair to Good
Yeagle Road	T-437	Gravel	Fair to Good

Source: PADOT Road Survey Forms, 1978; and Field Survey by Landplan, Inc., December 1992.

Table 40 B

**Derry Township
Roadway Surface Conditions**

<u>ROADWAY NAME & NUMBER</u>	<u>ROAD SURFACE</u>	<u>SURFACE CONDITION</u>
<u>State Routes</u>		
PA 54	Continental Blvd.	Bituminous Good
PA 254	Washingtonville Road	Bituminous Good
SR 1002	Strawberry Ridge Road	Bituminous Good
SR 1003	P.P. & L. Road	Bituminous Good
SR 1007	Diehl Road	Bituminous Fair to Good
SR 1009	Greenleaf Drive	Bituminous Fair to Good
SR 1009	Stamm Road	Bituminous Good
SR 2014	Diehl Road	Bituminous Fair to Good
SR 3010	Sechler Mill Road	Bituminous Good
SR 3012	Mexico Road	Bituminous Good
<u>Township Roads</u>		
Blee Hill Road	T-510	Bituminous Good to Fair
Brittain Road	T-413	Gravel/Dirt Fair
Bush Road	T-348	Bituminous/Gravel Good
Cameltown Hill Road	T-525	Bituminous Good to Fair
Crawford Road	T-396	Gravel/Dirt Good to Fair
Creek Road	T-411	Bituminous/Gravel Good to Fair
Cromley Drive	T-392	Gravel/Bituminous Fair to Poor
Dead End Road	T-418	Gravel/Dirt Poor
Degreen Road	T-417	Gravel Fair
DeLong Road	T-407	Gravel/Dirt Fair
Dieffenbach Road	T-350/409	Gravel/Bituminous Fair to Good
Fairview Road	T-407	Gravel Fair
Fossil Run Road	T-520	Bituminous Good
Gray Road	T-416	Bituminous Good
Hillside Road	T-385	Gravel/Bituminous Good to Fair
Indian Run Road	T-500	Bituminous Good
McMichael Road	T-378	Bituminous/Gravel Good to Fair
Mill Road	T-415	Bituminous/Gravel Fair
Mowery Road	T-365	Bituminous Poor
Roup Road	T-372	Gravel Fair
Rhoades Hill Road	T-387	Gravel/Dirt Fair
Shultz Road	T-394	Gravel Fair
Shed Road	T-376	Bituminous/Gravel Fair to Good
Smith Road	T-384	Gravel/Bituminous Fair
Spike Blue Hollow Road	T-390	Gravel Fair
Steffens Road	T-374	Gravel/Bituminous Fair to Good
Turtleback Road	T-419	Bituminous Fair to Good

Source: PADOT Road Survey Forms, 1989; and Field Survey by Landplan, Inc., December 1992.

Table 40 C

**Liberty Township
Roadway Surface Conditions**

<u>ROADWAY NAME & NUMBER</u>	<u>ROAD SURFACE</u>	<u>SURFACE CONDITION</u>
<u>State Routes</u>		
Interstate 80	Concrete	Good
PA Route 642	Bituminous	Good
PA Route 45	Bituminous	Good
SR 3003 Jackson School House	Bituminous	Fair to Good
SR 3004 Pottsgrove Road	Bituminous	Fair to Good
SR 3006 Stump Road	Bituminous	Fair to Good
SR 3007 Klondike Road	Oil & Chip	Good
SR 3008 West Valley Road	Bituminous	Good
SR 3010 Sechler Mill Road	Bituminous	Fair to Good
SR 3012 Mexico Road	Bituminous	Fair to Good
<u>Township Roads</u>		
Bald Top Road	T-330 Bituminous	Good
Beaver Run Road	T-318 Bituminous	Fair
Boop Devel. Road	T-329 Gravel	Fair to Good
Bower Lane	T-323 Dirt	Poor
Bridge Road	T-308 Bituminous/Gravel/Dirt	Fair to Poor
Camp Road	T-337 Gravel	Fair
Center Road	T-306 Bituminous/Gravel	Good to Fair
Chestnut Grove Rd.	T-334 Gravel/Bituminous	Fair to Good
Church Street	T-324 Bituminous	Good
Danny's Road	T-312 Gravel/Dirt	Fair to Poor
Hagenbuch Loop	T-848 Bituminous	Fair to Good
Hilkert Road	T-367 Bituminous	Fair to Good
Jackson Road	T-318 Gravel/Bituminous	Fair to Good
Keefer Mill Road	T-346 Bituminous	Fair
Kelly's Dam Road (Creek Road)	T-324 Gravel/Bituminous	Fair
Knapp Road	T-361 Dirt/Gravel	Poor
Kriswell Road	T-346 Bituminous	Fair
Mauger Road	T-330 Bituminous	Good
McCracken Road	T-843 Bituminous	Fair to Good
Mooresburg Road	T-741 Bituminous	Good
(Mooresburg St.)	T-328 Dirt	Poor
Mountain Road	T-302 Gravel	Fair
Mowrey Road	T-365 Bituminous	Fair
Oak Grove Road	T-332 Gravel/Bituminous	Fair to Good
R&H Avenue	T-387 Dirt/Gravel	Fair
Ridge Road	T-844 Bituminous	Good
School House Road	T-318 Bituminous	Good
Smith Road	T-363 Bituminous	Fair to Poor

Starner Road	T-318	Bituminous	Good
Starner Road	T-365	Bituminous	Good
Tower Road	T-310	Bituminous	Fair to Good
VanSant Road	T-359	Bituminous	Fair to Good
Voris Road	T-304	Bituminous	Fair

Source: PADOT Road Survey Forms, 1978; and Field Survey by Landplan, Inc., January 1993.

Table 40 D

**Limestone Township
Roadway Surface Conditions**

<u>ROADWAY NAME & NUMBER</u>		<u>ROAD SURFACE</u>	<u>SURFACE CONDITION</u>
<u>State Routes</u>			
Route 54 or 44?		Bituminous	Good
Route 254		Bituminous	Good
SR 4001	County Line Road	Bituminous	Good to Fair
SR 4002		Bituminous	Fair to Good
SR 4003		Bituminous	Good
SR 4004		Bituminous	Fair to Good
SR 4006		Bituminous	Good to Fair
SR 4008		Bituminous	Good
<u>Township Roads</u>			
Beaver Run Road	T-316	Bituminous/Gravel	Fair
Chaapel Road	T-399	Dirt	Fair
County Line Road	T-316	Bituminous	Good
Craig Road	T-403	Bituminous	Good
Fairview Road	T-407	Bituminous	Good to Fair
Gardner Road	T-417	Gravel	Fair
Hagenbuch Road	T-326	Bituminous	Good
Keefer Mill Road	T-346	Bituminous	Fair
Laidacker Road	T-401	Bituminous	Good to Fair
Limestone Road	T-422	Bituminous/Dirt	Good to Fair
Marr Road	T-340	Bituminous	Fair
Mill Road	T-328	Bituminous	Good
Myer Road	T-403	Dirt/Gravel	Fair
Pfleegor Road	T-395	Dirt/Gravel	Fair
Quarry Road	T-395	Dirt/Gravel	Fair to Poor
Schuyler Road	T-346/417	Bituminous	Good
Shady Hill Road	T-403	Dirt/Gravel	Fair
Smith Road	T-338	Bituminous	Good
Stiles Road	T-344	Dirt	Fair
Walter Road	T-342	Bituminous/Dirt	Fair to Poor
Ziegler Road	T-320	Bituminous	Good

Source: PADOT Road Survey Forms, 1978; and Field Survey by Landplan, Inc., December 1992 and January 1993.

Table 40 E

**West Hemlock Township
Roadway Surface Conditions**

<u>ROADWAY NAME & NUMBER</u>		<u>ROAD SURFACE</u>	<u>SURFACE CONDITION</u>
<u>State Routes</u>			
Interstate 80		Concrete	Good
PA Route 642		Bituminous	Good
SR 2007	Columbia Hill Road	Bituminous	Good
SR 2012	Frosty Valley Road	Bituminous	Good
SR 2014	Diehl Rd., Stine Rd., & Hedge Road	Bituminous	Good
SR 2016		Bituminous	Good
<u>Township Roads</u>			
Billhime Road	T-418/382	Gravel	Fair to Poor
County Line Road	T-412	Bituminous/Dirt	Fair to Good
Gotschal Road	T-343	Bituminous/Dirt	Good to Fair
Hartman Road	T-379	Bituminous	Good to Fair
Kashner Road	T-355/414	Bituminous	Fair
Kitchen Road	T-389	Gravel	Fair to Good
Robinson Road	T-416	Bituminous/Gravel	Good
Shultz Road	T-420	Gravel	Fair
Styer Road	T-389	Bituminous	Good
Welliver Road	T-379	Bituminous	Good to Fair
Woodside Road	T-385	Bituminous	Good
*	T-357	Gravel/Dirt	Poor
*	T-391	Gravel/Dirt	Fair

* No road name found

Source: PADOT Road Survey Forms, 1978; and Field Survey by Landplan, Inc., December 1992 and January 1993.

4. Township Bridges

Within the Planning Area there are a total of 17 County-owned bridges and one (1) Township-owned structure according to County Bridge records. Each of these bridges exceeds 20 feet in length and is therefore subject to PADOT's bi-annual inspection requirements. Numerous other bridges and structures cross small creeks and runs throughout the Planning Area, but since their lengths do not exceed 20 feet, no state inventory of these structures is required. General information on each of the 17 County-owned structures, extracted from their October 1991 Inspection Reports, follows. (The listing follows the number and letter designation used by PADOT.)

* Montour County Bridge D in Liberty Township carries Township Route T-308 over Chillisquaque Creek. It is a timber covered bridge, built in 1850, with a length of 85'9" and a width of 14'2" curb to curb. At the time of the 1991 inspection a three ton posting was observed. While the bridge itself is in fair to good condition with an expected life expectancy of 18 years, the approach roadways are in very poor condition. The bridge can be posted at six tons based on the operating rating in the March 1990 inspection report. The addition of a "One Lane Bridge" sign at the south approach was also recommended.

* Montour County Bridge E in Limestone Township carries Township Route T-422 over Limestone Run Creek. The bridge is concrete girder structure, built in 1913, with a length of 40' and a width of 16' curb to curb. At the time of the 1991 inspection no posting was observed. The bridge itself is in fair condition with an expected life expectancy of 12 years. Approach roadways are however in good condition. The bridge does not require a load posting, but should be posted as a one lane bridge.

* Montour County Bridge G in West Hemlock Township carries Township Route T-414 over Kase Run Creek. It is a steel multi-stringer structure built in 1920 with a length of 26' and a width of 13'11" curb to curb. A posting of "12 Tons, except combinations of 22 Tons", was observed at the time of inspection. This bridge is in very poor condition with a life expectancy of only 3 years. According to the 1991 Inspection Report, the structure only serves one farmer's field and it was recommended that it be vacated or sold to the property owner. If the bridge is not vacated, it should be posted for 10 tons and both approaches should be signed for a one lane bridge.

* Montour County Bridge #2 in Liberty Township carries Township Route T-308 over Beaver Run Creek. The bridge is a steel pony truss structure built in 1912 with a length of 39'9" and a width of 12'5" curb to curb. A posting of 3 tons was observed. The 1991 inspection report recommended immediate closure of this bridge. Recommendations were made to the County Commissioners outlining specific repairs which could extend the life of the

structure. Even after repairs though, the bridge will only have a life expectancy of 4 years.

* Montour County Bridge #3 in Liberty Township carries State Route 3001 over Beaver Run Creek. The bridge is a concrete box culvert structure with a length of 23'9" and a width of 28'1" curb to curb. The bridge was built in 1991 and is in very good condition. The Report for this structure indicated though that the approach shoulders had not been completed at the time of the 1991 inspection and that they will require paving. Approach guide rails were also recommended. No load posting was required and the bridge has a life expectancy of 50 years.

* Montour County Bridge #4 in Liberty Township carries Township Route T-318 over Beaver Run Creek. The bridge is a concrete slab structure built in 1924 with a length of 28'6" and a width of 14'8" curb to curb. A posting of 5 tons was observed at the time of inspection. The bridge is in fair poor condition with a life expectancy of 15 years. The 1991 Report recommended the structure's posting remain at five tons and that "One Lane Bridge" postings should be installed.

* Montour County Bridge #6 in Liberty Township carries Township Route T-324 over Chillisquaue Creek. The bridge is a steel pony truss structure, built in 1910 and reconstructed in 1982, with a length of 76'9" and a width of 13'3" curb to curb. The bridge was found to be in fair condition, with a life expectancy of 12 years, after repairs. A posting of eight tons was missing on the south approach at the time of inspection.

* Montour County Bridge #7 in Liberty Township carries Township Route T-346 over Chillisquaue Creek. The bridge is a timber covered structure built in 1853 and reconstructed in 1985. The bridge has a length of 75'2" and a width of 15'4" curb to curb. A posting of three tons was missing at the time of inspection. The bridge needs numerous repairs and has a remaining life expectancy of eight years. The 1991 report recommended the posting remain at three tons and that "One Lane Bridge" postings and vertical clearance signs be installed.

* Montour County Bridge #9 in Derry Township carries Township Route T-392 over Mud Creek. The bridge is a single span steel truss structure, built in 1907, with a length of 39'6" and a width of 12'6" curb to curb. The bridge has an estimated life expectancy of 8 years after recommended repairs. A posting of eight tons was observed at the time of inspection. This structure is in poor condition and numerous repairs were recommended.

* Montour County Bridge #10 in Derry Township carries Township Route T-407 over the East Branch of Chillisquaue Creek. The bridge is a single span steel pony truss structure supporting a wooden deck built in 1909. The

bridge has a length of 48' and a width of 11' curb to curb. A posting of seven tons was observed at the time of inspection. The bridge needs numerous repairs and has a remaining life expectancy of only four years, even after repairs. The 1991 report recommended the posting remain at seven tons, with the addition of "Except Combination 14 Tons". The addition of "One Lane Bridge" postings was also recommended.

* Montour County Bridge #11 in Derry Township carries Township Route T-378 over the East Brach of Chillisquaque Creek. The bridge is a single span steel truss structure built in 1909 and reconstructed in 1991. The bridge has a length of 58' and a width of 12'3" curb to curb. Load posting signs were missing at the time of inspection and a posting of "Ten tons, except combination of 19 tons" should be in effect. "One Lane Bridge" signs should also be installed. Even after the 1991 repairs, the bridge needs numerous repairs and has a remaining life expectancy of ten years.

* Montour County Bridge #12 in Derry Township carries Township Route T-396 over the East Branch of Chillisquaque Creek. The bridge is a single span steel multi-girder structure, built in 1919, with a length of 31'9" and a width of 12'10" curb to curb. Posting signs were missing at the time of inspection. The bridge needs an immediate underwater inspection and several repairs are recommended. It has an estimated life expectancy of 12 years. The bridge should have postings of "17 tons, except combinations of 30 tons" and "One Lane Bridge" signs.

* Montour County Bridge #13 in Derry Township carries Township Route T-417 over Chillisquaque Creek. The bridge is a single span steel pony truss built in 1910. The bridge has a length of 48'4" and a width of 13'3" curb to curb. Bridge posting signs were missing at the time of inspection. The bridge needs numerous repairs and has a remaining life expectancy of eight years with repairs. The 1991 report recommended posting at "Ten tons, except combinations of 15 tons". The addition of "One Lane Bridge" postings were also recommended.

* Montour County Bridge #14 in Anthony Township carries Township Route T-360 over the Middle Branch of Chillisquaque Creek. The bridge is a single span steel multi-girder structure, built in 1909, with a length of 26'10" and a width of 12'11" curb to curb. A posting of 18 tons was observed at the time of inspection. Numerous repairs were recommended and the bridge has an estimated life expectancy of 8 years.

* Montour County Bridge #15 in Anthony Township carries Township Route T-431 over the West Branch of Chillisquaque Creek. The bridge is a single span steel multi-girder structure built in 1910 and reconstructed in 1991. The bridge has a length of 30' and a width of 17'6" curb to curb. A posting of six tons was observed at the time of inspection. The bridge was in

good to new condition at the time of inspection with remaining life expectancy of 20 years.

* Montour County Bridge #16 in Limestone Township carries Township Route T-417 over Beaver Run, a branch of Chillisquaque Creek. The bridge is a single span skewed deck arch structure, built in 1915, with a length of 49'4" and a width of 14'6" curb to curb. Posting signs were missing at the time of inspection. The bridge is in fair condition with an estimated life expectancy of 12 years. The bridge should have posting for a one lane bridge.

* Montour County Bridge #17 in Limestone Township carries Township Route T-417 over the West Branch of Chillisquaque Creek. The bridge is a single span steel pony truss built in 1911. The bridge has a length of 43'8" and a width of 13'9" curb to curb. Bridge posting signs were missing at the time of inspection. The bridge needs numerous repairs and has a remaining life expectancy of ten years with repairs. The 1991 report recommended a posting of "8 tons" and the addition of "One Lane Bridge" signs.

Most of the bridges in the Planning Area were built over 50 years ago and need frequent maintenance to remain in safe condition. AS development increases in the Planning Area many of these bridges will be used more heavily which will likely increase their need for maintenance.

B. TRAFFIC ANALYSIS AND FORCASTS

The development of large employment centers in the Danville area, including Geisinger Medical Center, has lead to increased traffic speeds and increased traffic volumes through the Planning Area. PA Routes 642 and 54 are particularly popular commuter routes. The speed and volume of traffic on these and other routes which travel through the Planning Area are a concern because most commuters do not always slow down sufficiently as they pass through the more densely-populated areas. Additional speed limit postings and police surveillance should be considered to help address these issues.

The driveway permitting process is another area of concern in the Planning Area. The additional traffic volumes expected as area employers grow and as further lots are subdivided or developed may contribute to potentially hazardous situations at both new and existing driveway and street intersection locations.

Although none of the Townships in the Planning Area is proposing to build new roadways, PADOT's Twelve Year Road and Highway Project Program contains many projects being planned within the Planning Area which will impact residents of the Study Area. Table 41 briefly describes each project currently included in

PADOT's plans. (The current Twelve Year Program will be reviewed at a Public Hearing in March of 1993.)

Table 41

**Planning Area Townships and Montour County
PADOT Road and Highway Projects**

**Twelve-Year Program
1992-2004**

<u>Route #</u>	<u>Project Location</u>	<u>Project</u>	<u>Timing</u>	<u>Cost (000's)</u>
SR 0044	Rt. 44 Bridge over Chillisquaque Creek Anthony Township	Replacement (Engineering)	1 st 4 yrs.	86
SR 0044	Rt. 44 Bridge over Chillisquaque Creek Anthony Township	Replacement (Construction)	2 nd 4 yrs.	488
SR 1002	SR 1002 Bridge over Lowry Creek Derry Township	Replacement (Engineering)	1 st 4 yrs.	91
SR 1002	SR 1002 Bridge over Lowry Creek Derry Township	Replacement (ROW/Construction)	3 rd 4 yrs.	515
SR 1003	SR 1003 Bridge 2 over Lowry Creek Derry Township	Replacement (Engineering)	1 st 4 yrs.	86
SR 1003	SR 1003 Bridge 2 over Lowry Creek Derry Township	Replacement (ROW/Construction)	2 nd 4 yrs.	491
SR 9900	SR 9900 Bridge over Mud Creek Derry Township	Replacement (Eng/ROW/Construction)	2 nd 4 yrs.	331
SR 9900	SR 9900 Bridge over Mud Creek Derry Township	Replacement (Engineering)	1 st 4 yrs.	68

(Continued on Next Page)

<u>Route #</u>	<u>Project Location</u>	<u>Project</u>	<u>Timing</u>	<u>Cost (000's)</u>
SR 9900	SR 9900 Bridge over Chillisquaque Creek Derry Township	Replacement (ROW/Construction)	2 nd 4 yrs.	382
SR 3003	SR 3003 Bridge over Chillisquaque Creek Liberty Township	Replacement (Engineering)	1 st 4 yrs.	117
SR 3003	SR 3003 Bridge over Chillisquaque Creek Liberty Township	Replacement (ROW/Construction)	3 rd 4 yrs.	714
SR 3004	SR 3004 Bridge over Beaver Run Liberty Township	Replacement (Engineering)	1 st 4 yrs.	67
SR 3004	SR 3004 Bridge over Beaver Run Liberty Township	Replacement (ROW/Construction)	2 nd 4 yrs.	409
SR 9900	SR 9900 CO. Br. #2 over Beaver Run Liberty Township	Replacement (Eng/ROW/Construction)	3 rd 4 yrs.	391
SR 4003	SR 4003 South Bridge over Limestone Run Limestone Township	Replacement (Eng/ROW/Construction)	3 rd 4 yrs.	179
SR 0642	Rt. 642 Bridge over Mahoning Creek West Hemlock Township	Replacement (Engineering)	1 st 4 yrs.	65
SR 0642	Rt. 642 Bridge over Mahoning Creek West Hemlock Township	Replacement (ROW/Construction)	3 rd 4 yrs.	368

Other Montour County Projects Outside the Planning Area

SR 0054	Rt. 54 Danville Bridge over Susque. River Danville Borough	Replacement (Eng/ROW/Construction)	1 st 4 yrs.	11,673
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SR 0054	Rt. 54 Approach to Danville Bridge Danville Borough	Miscellaneous (Eng/ROW/Construction)	1 st 4 yrs.	4,000
SR 0080	I-80 Restoration (EBL & WBL) SR 3006 Eastward to County Line Liberty, Valley and West Hemlock Townships	Restoration	1 st 4 yrs.	26,600
SR 0642	Rt. 642 Bridge over Mahoning Creek Valley Township	Replacement (Engineering)	1 st 4 yrs.	92
SR 0642	Rt. 642 Bridge over Mahoning Creek Valley Township	Replacement (ROW/Construction)	2 nd 4 yrs.	563
SR 0642	Rt. 642 Bridge II over Mahoning Creek Valley Township	Replacement (Engineering)	1 st 4 yrs.	120
SR 0642	Rt. 642 Bridge II over Mahoning Creek Valley Township	Replacement (ROW/Construction)	2 nd 4 yrs.	895
SR 9900	SR 9900 Bridge over Kase Run Valley Township	Replacement (Eng/ROW/Construction)	1 st 4 yrs.	270
SR 9900	SR 9900 Bridge over Indian Run Creek Valley Township	Replacement (Eng/ROW/Construction)	1 st 4 yrs.	240

Source: Pennsylvania Department of Transportation, 12 Year Transportation Program of Scheduled Improvements for Montour County, 1992 – 2004.

Several roadway surface projects were completed by PADOT during the 1992-93 year and others have been tentatively scheduled for 1993-94. Roadway surface treatment projects are considered maintenance projects and are not part of PADOT's 12-year Program. Maintenance projects for 1992-1993 and 1993-1994 for the Planning Area Townships and other areas of Montour County are listed below in Table 42. (Completed projects include a completion date and proposed 1993-94 projects are listed separately because of their tentative nature.)

Table 42**Planning Area and Montour County
PADOT Road Surface Treatment Projects****1992-1993; Tentative 1993-1994**

<u>Route #</u>	<u>Project Location</u>	<u>Timing</u>	<u>Cost (000's)</u>
Route 642	Rt. 45 to Vill. Maudsley Valley Township	8/92 Complete	139
SR 1003	Rt. 44 to SR 1005 Anthony Township	10/92 Complete	37
SR 1008	SR 4008 to SR 1003 Anthony Township	9/92 Complete	30
SR 2012	SR 2007 to SR 4006 West Hemlock Township	7/92 Complete	21
SR 2017	SR 2006 to SR 4002 Cooper Township	8/92 Complete	16
SR 3003	Rt. 642 to SR 3010 Liberty Township	9/92 Complete	10
SR 3007	Rt. 642 to Rt. 54 Liberty Township	8/92 Complete	6
SR 3008	SR 3007 to Rt. 54 Valley Township	8/92 Complete	30
SR 3009	Rt. 642 to Rt. 54 Valley Township	8/92 Complete	6
SR 4001	Rt. 54 to SR 4008 Limestone Township	8/92 Complete	3
Route 642	I-80, Exit 33 Valley Township	8/92 Complete	13
SR 3012	SR 3003 to Rt. 254 Liberty Township	8/92 Complete	49
SR 3006	SR 3003 to Rt. 642 Liberty Township	93-94 Tentative	
SR 3010	SR 3003 to Rt. 54 Liberty Township	93-94 Tentative	

**PADOT Road Surface Treatment Projects (Continued)
1992-1993; Tentative 1993-1994**

SR 4003	Rt. 254 to SR 4004 Limestone Township	93-94 Tentative
Route 44	SR 4001 to SR 4008 Limestone Township	93-94 Tentative
Route 54	Rt. 44 to SR 1002 Anthony & Derry Twps.	93-94 Tentative
SR 4008	County Line to Rt. 44 Anthony Township	93-94 Tentative
SR 1002	Rt. 54 to 1007 Derry Township	93-94 Tentative
SR 4004	Lime.Twp. to Rt. 54 Derry Township	93-94 Tentative
SR 1007	SR 1002 to Rt. 254 Derry Township	93-94 Tentative
SR 2014	Rt. 254 to Rt. 642 Derry & W. Hemlock Twps.	93-94 Tentative
SR 2008	SR 2005 to County Line Copper Township	93-94 Tentative
SR 2013	SR 2006 to SR 2006 Cooper Township	93-94 Tentative

Source: Pennsylvania Department of Transportation, Surface Improvements (General Maintenance) for Montour County, 1992-93 and 1993-94 (Tentative).

C. RAIL, BUS AND AIR SERVICES

The Danville Municipal Airport has no commuter or jet plane service although there is a small office for aircraft rental and flying instruction. There are two larger airports however within reasonable proximity to the Planning Area which have commuter and jet service; the Williamsport/Lycoming County Airport in Williamsport and the Wilkes Barre/Scranton Airport at Avoca. The Wilkes Barre/Scranton Airport offers numerous airline connections while the Williamsport/Lycoming County facility presently offers only US Air commuter flights. Both airports offer connections to hub cities which provide service to all domestic and foreign destinations.

Greyhound Trailways Bus Lines and Susquehanna Trailways offers bus service from Danville, Bloomsburg, Berwick, Muncy, Hazleton, Lewisburg, Sunbury and Shamokin. Danville Royal Travel, at 318 Ferry Street in Danville, is the local bus stop with service twice a day to Philadelphia. Danville bus service to Pittsburgh is routed through Williamsport. In addition, Myers Charter Service, located in Mahoning Township, provides tours, charters and excursions throughout the United States.

Amtrak offers passenger service from Harrisburg. Information and tickets can be obtained by contacting Danville Royal Travel.

The North Shore Railroad System, a network of five short line railroads, serves Danville, Bloomsburg and Berwick area industries in the north central and northeastern part of the State. North Shore Railroad is based in Northumberland and provides area businesses and industries with access to 40% of the U.S. population and major markets in the Northeast and Middle Atlantic regions of the country via its connections with other rail facilities. Conrail also provides freight services for local industries, including PA Power and Light's Montour Plant and Crop Production Services, near Washingtonville.

There are several trucking firms based within or near the Planning Area. The Planning Area is ideally located for trucking because of its proximity to I-80 and major metropolitan areas in eastern and northeastern United States.

In addition, Strick Corporation, a major manufacturer of truck trailers is located in Limestone Township. They manufacture two lines of trailers, one 54 feet in length and the other 48 feet. Their production varies from 20-30 trailers per day, for both lines combined.

CHAPTER 8.

HOUSING

Housing is another important indicator of an area's growth or decline. The number of housing units, their condition and their value can tell a great deal about an area or a community and its economic well-being.

A. HOUSING SURVEY AND PROFILE

Conventional single family, owner-occupied homes dominant the housing stock in the Planning Area, although there are a few multi-family units, typically in the form of apartments. There are also a sizeable number of mobile homes scattered throughout the Planning Area and in two mobile home parks. The Blue Springs Mobile Home Park and the Shady Oaks Mobile Home Park are both located in Derry Township and contain pads for approximately 150 mobile homes, about 21% of all mobile homes in Montour County; 2.2% of all housing units. Notwithstanding the limited number of multi-family dwellings in the Planning Area, there are often one or more houses or mobile homes, or a combination of the two, located on a single parcel of ground in the Study Area. Table 43 presents a breakdown of housing types within Montour County in 1990 and their vacancy rates, as determined by the U.S. Census Bureau, and Table 44 on the following page reviews the types of housing units found in each of the Planning Area Townships.

Table 43

Montour County Housing Types, By Number of Units – 1990

	<u>Total Housing Units</u>	<u>Total Vacant Housing Units</u>
Single Family Detached	4,248 (61.7%)	148 (3.5%)
Single Family Attached	684 (9.9%)	56 (8.2%)
2 Units	351 (5.1%)	30 (8.5%)
3 or More Units	783 (11.4%)	59 (7.5%)
Mobile Home/Trailer	719 (10.4%)	41 (5.7%)
Other	<u>100 (1.5%)</u>	<u>8 (8.0%)</u>
TOTALS	6,885 (100.0%)	342 (5.0%)

Source: U.S. Bureau of Census, 1990 Census of Population and Housing, June 1992.

As shown in Table 44, there are 402 mobile homes situate in the Planning Area Townships (including those located in mobile home parks and as free-standing mobile homes) which represents 55.9% of all mobile homes in Montour County. Nearly 22% of all housing units in Anthony, Derry, Liberty, Limestone and West Hemlock Townships are mobile homes. Derry Township alone accounts for 183 of the mobile home units, or 45.5% of all such units in the Study Area. While this sizable proportion of mobile homes presents numerous challenges for the Planning Area Townships, the units also offer low cost housing opportunities for residents which are normally available only with multi-family housing.

According to 1990 Census statistics, Montour County has a low housing vacancy rate which indicates a stable population base in the area. When the vacant housing units are looked at more closely it is clear that only a fraction are actually available for occupancy. While 37%, or 127 of the 342 vacant housing units in the County, were available for rent or sale in 1990, the balance were either seasonal (42 units); uninhabitable and boarded up (11 units); rented or sold but not occupied at the time of the census (59 units); or other vacant (100 units). The overall vacancy rate within the Planning Area (5.1%) is almost identical to the 5.0% vacancy rate within the County as a whole, and it is likely that a similar proportion of units identified by the Census as “vacant” are actually not available throughout the Planning Area to house municipal residents. This low vacancy rate contributes to the pressure to build and demand for new housing units in the Planning Area.

Table 45 presents the occupancy and ownership characteristics for all housing units in each of the Planning Area Townships. As the table shows, the Planning Area has a high level of owner-occupied homes and comparatively few renters.

Table 45

**Planning Area Townships and Montour County
Owner-Occupied and Rental Units – 1990**

	Total Housing <u>Units</u>	Occupied <u>Units</u>	<u>Total Occupied</u>	
			<u>Owner</u>	<u>Renter</u>
Anthony Township	465	433 (93.1%)	395 (91.2%)	38 (8.8%)
Derry Township	471	452 (96.0%)	362 (80.1%)	90 (19.9%)
Liberty Township	520	484 (93.1%)	403 (83.3%)	81 (16.7%)

Owner-Occupied and Rental Units - 1990 (Continued)

Limestone Township	267	263 (98.5%)	231 (87.8%)	32 (12.2%)
West Hemlock Twp.	144	140 (97.2%)	132 (94.3%)	8 (14.1%)
	_____	_____	_____	_____
PLANNING AREA TOTALS	1,867	1,772 (94.9%)	1,523 (86.0%)	249 (14.0%)
MONTOUR COUNTY	6,885	6,543 (95.0%)	4,686 (71.6%)	1,857 (28.4%)

Source: U.S. Bureau of Census, 1990 Census of Population and Housing, June 1992.

The Planning Area as a whole has significantly higher level of home ownership (86.0%) than the County (71.6%) and a correspondingly lower percentage of renters (14.0%) than the County (28.4%). In addition, the 86.0% rate of home ownership in the Planning Area is significantly higher than the 70.6% rate of home ownership statewide. This phenomenon is at least partially due to the limited number of apartment or multi-family units located throughout the Planning Area and the sizeable number of farmers living and working in the Area.

The value of owner-occupied homes in the Planning Area, as determined by from 1990 Census statistics, is presented in Table 46. In general, the Planning Area has a greater number of homes in the \$50,001 to \$99,999 value category than the County as a whole and, with the exception of some more expensive homes in West Hemlock Township, proportionally fewer homes valued outside this moderate price range.

Table 46

**Planning Area Townships and Montour County
Owner-Occupied Home Values – 1990**

	<u>Less Than \$50,000</u>	<u>\$50,001 to \$99,999</u>	<u>\$100,000 and Over</u>	<u>Median Value</u>
Anthony Township	18.7% (74)	78.8% (311)	2.5% (10)	\$55,700
Derry Township	11.0% (40)	85.4% (309)	3.6% (13)	\$61,100
Liberty Township	14.9% (60)	78.2% (315)	6.9% (28)	\$66,100
Limestone Township	16.4% (38)	78.4% (181)	5.2% (12)	\$66,300
West Hemlock Twp.	9.1% (12)	77.3% (102)	13.6% (18)	\$76,900
PLANNING AREA TOTALS	14.7% (224)	80.0% (1218)	5.3% (81)	\$65,220 (Average)
MONTOUR COUNTY	22.3% (1,045)	66.6% (3,120)	11.1% (521)	\$62,200

Source: U.S. Bureau of Census, 1990 Census of Population and Housing, June 1992.

B. GENERAL HOUSING CONDITIONS

Housing conditions and the overall housing quality in an area can be difficult to quantify and are highly subjective evaluations. Census data provides some measured indicators of housing quality, such as overcrowding, lack of plumbing, and lack of kitchen facilities. In addition, the census also indicates the general age of the housing stock. While houses built prior to 1940 may require extensive repair and the replacement of one or more building systems, age alone is not an accurate indicator of housing quality. The qualitative measures mentioned, including crowding, adequate plumbing and kitchen facilities, and age of housing, must also be balanced with the personal beliefs and desires of residents and the affordability or the cost of

housing as a proportion of area residents' income. For example, Amish residents in the area may lack complete plumbing and kitchen facilities, but do not consider their housing inadequate. The Pennsylvania Department of Community Affairs (DCA) considers any housing unit with more than 1 person per room overcrowded. Some larger families may be "overcrowded" by DCA's standards, but perfectly happy with their current living conditions.

Table 47 illustrates the number of persons per occupied housing unit, those units considered overcrowded, and the number of homes lacking complete plumbing or kitchen facilities in the Planning Area. Table 48 reviews the age of all Study Area housing units.

Table 47

Planning Area Townships and Montour County Housing Conditions – 1990

	Persons Per Occupied Unit	Over 1.01* Persons Per Room	Lacking ** Complete Plumbing Facilities	Lacking** Complete Kitchen Facilities
Anthony Township	2.97	16 (3.7%)	20 (4.3%)	15 (3.2%)
Derry Township	2.81	10 (2.2%)	18 (3.9%)	9 (1.9%)
Liberty Township	2.70	6 (1.2%)	8 (1.5%)	3 (.3%)
Limestone Township	2.99	7 (2.7%)	1 (.4%)	3 (1.1%)
West Hemlock Township	2.87	1 (.7%)	8 (5.5%)	7 (4.8%)
PLANNING AREA TOTALS	2.87 (Average)	40 (2.1%)	55 (3.0%)	37 (2.0%)
MONTOUR COUNTY	2.52 (Average)	90 (1.4%)	90 (1.3%)	62 (.9%)

* Calculated as a percentage of occupied housing units.

** Calculated as a percentage of all housing units.

Source: U.S. Bureau of Census, 1990 Census of Population and Housing, Summary of Social, Economic and Housing Characteristics, June 1992.

Table 47 indicates that there are a few substandard housing units in the Planning Area. Since the total number of overcrowded units and those lacking complete plumbing or kitchen facilities is small and likely to overlap, i.e. a house without complete plumbing facilities may also lack complete kitchen facilities, the total proportion of substandard homes, as indicated by these statistics, is probably less than 2% of all units. There may be a larger proportion of homes needing extensive repairs. (See Table 48.) The considerable number of older homes within the Planning Area may indicate the housing stock is in danger of deteriorating. Obviously, while many of the homes built before 1939 have been well maintained and are in good condition, a sizeable portion of these older homes may be in deteriorating condition and may require the replacement of major systems to continue to offer safe and health living conditions.

In addition to trying to identify the number of homes in substandard condition in the Planning Area, it is also important to note the large percentage of homes which are likely to be in good to excellent condition. There has been extensive housing development in Anthony, Derry, Liberty, Limestone and West Hemlock Townships since 1980. These recently built homes, which make up a significant proportion of the total number of housing units in the Planning Area, are likely to be in excellent condition. Further, nearly half the homes in the Planning Area were built between 1940 and 1979. Most of these homes are likely to be in adequate, if not good or excellent condition; depending on the level of maintenance they have received. It should be noted, however, that older mobile homes, those 10 years old or older, tend to deteriorate faster than other types of single family homes. Therefore, the age of the present mobile home stock should be kept in mind when reviewing general housing conditions and forecasting future housing needs.

Table 48

**Planning Area Townships and Montour County
Age of Housing Units – 1990**

	1939 or <u>Earlier</u>	1940 – <u>1979</u>	1980 – <u>1990</u>
Anthony Township	156 (33.5%)	210 (45.2%)	99 (21.3%)
Derry Township	120 (25.5%)	238 (50.5%)	113 (24.0%)
Liberty Township	158 (30.4%)	298 (57.3%)	64 (12.3%)
Limestone Township	94 (35.1%)	131 (49.0%)	42 (15.9%)

Age of Housing Units – 1990 (Continued)

	1939 or <u>Earlier</u>	1940 – <u>1979</u>	1980 – <u>1990</u>
West Hemlock Twp.	46 (31.7%)	59 (41.4%)	39 (26.9%)
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PLANNING AREA TOTALS	574 (30.7%)	936 (50.2%)	357 (19.1%)
<hr style="border: 0.5px solid black;"/>			
MONTOUR COUNTY	2,658 (38.6%)	2,919 (42.4%)	1,308 (19.0%)

Source: U.S. Bureau of Census, 1990 Census of Population and Housing, Summary of Social, Economic and Housing Characteristics, June 1992.

A field survey conducted in December 1992 and January 1993 by Landplan, Inc. indicates that the majority of the housing stock in the Planning Area is in fair, or good to excellent condition. Perhaps as many as 5% of the housing units are in substandard condition, and an additional 5-8% will need major renovation in the near future. Further, there could be potential problems with the aging of mobile homes, which make up nearly a quarter of the total housing stock. (See Appendix F for a copy of the rating criteria used to evaluate housing conditions in the Planning Area.)

C. HOUSING NEEDS ASSESSMENT

Housing in the Planning Area is affordable according to Pennsylvania Department of Community Affairs standards for affordability. It appears that the needs of lower income families are being met by mobile homes. Unfortunately, the density of development in the mobile home parks has been identified as a concern by municipal officials in the Planning Area. The lack of a municipal water supply in the Blue Springs Mobile Home Park and both public sewer and water facilities in the Shady Oaks Mobile Home Park, makes the density in these mobile home parks an environmental challenge and places a heavy burden on local service providers, such as volunteer fire companies.

In 1988, according to records from the PA Housing Finance Agency, there were no assisted or subsidized public housing units in the Planning Area, although there were a total of 281 public and private assisted rental units in the County. Of these units, 83 were for elderly residents, 191 were considered family units, and 7 were handicapped units.

At the present time, there appears to be no need for assisted or subsidized housing in the Planning Area since housing costs within the Study Area are very affordable when taken as a proportion of total income. The Department of Community Affairs considers housing to be affordable to renters who spend 30% or less of their gross incomes for rent and to homeowners who spend no more than 28% of their gross incomes for mortgage principal and interest, property taxes and insurance. Tables 49 and 50 review homeownership and rental costs as a proportion of income for each Township in the Planning Area.

Table 49

**Planning Area Townships and Montour County
Home Owner Housing Costs – 1990 ***

	With a Mortgage		Not Mortgaged	
	Median Selected Monthly Owner Costs	Monthly Costs as a % of Gross Hsehold Income	Median Selected Monthly Owner Costs	Monthly Costs as a % of Gross Hsehold Income
Anthony Township	\$489.00	17.2%	\$204.00	11.7%
Derry Township	\$531.00	14.7%	\$209.00	12.1%
Liberty Township	\$640.00	19.4%	\$187.00	11.2%
Limestone Township	\$488.00	22.2%	\$216.00	12.1%
West Hemlock Township	\$691.00	15.2%	\$222.00	11.3%
MONTOUR COUNTY	\$586.00	16.8%	\$203.00	11.9%

* Based on sample survey of specified owner-occupied housing units.

Source: U.S. Bureau of Census, 1990 Census of Population and Housing, Summary of Social, Economic and Housing Characteristics, June 1992.

Table 50

**Planning Area Townships and Montour County
Renter Housing Costs – 1990 ***

	<u>Median Gross Monthly Rent</u>	<u>Rental Costs as a % of Gross Income</u>
Anthony Township	\$400.00	23.6%
Derry Township	\$360.00	23.3%
Liberty Township	\$327.00	15.6%
Limestone Township	\$350.00	20.0%
West Hemlock Township	\$325.00	10.0%
MONTOUR COUNTY	\$329.00	22.2%

* Based on sample survey of all renter-occupied

Source: U.S. Bureau of Census, 1990 Census of Population and Housing, Summary of Social, Economic and Housing Characteristics, June 1992.

In 1988, the average Pennsylvania homeowner spent an estimated 18.6% of his income for housing, while the average renter spent 17.1% of his income. Within the Planning Area, home ownership costs as a proportion of income generally fall below the state average, while renter costs in the Planning Area tend to be higher as a proportion of income than the state average. Still rental payments within the Planning Area, while larger proportionally than the state averages, are well below the affordability threshold.

Pennsylvania's Housing Finance Agency published An Assessment of Special Housing Needs in the Commonwealth in June of 1990. That study found that in rural areas, local housing markets were pressured to produce additional owner-occupied housing at both market and below market prices. The high cost of constructing or extending necessary infrastructure, however, makes the development of moderate-priced housing in rural areas difficult. In the Planning Area, the pressure for the development of additional owner-occupied housing is apparent. These growth pressures must be balanced with the need to preserve prime farmland and minimize the environmental impacts of increased development on the quality of the area's ground water supply.

D. HOUSING AND BUILDING CODES

The County administers both Zoning and Subdivision regulations throughout the Planning Area, including the issuance of building permits. Recent development pressures have made it more challenging for the County to administer these multi-faceted processes. Because the majority of the Planning Area is without public sewer and water facilities, the quantity and intensity of new residential development can have a larger environmental impact on the area than it might in an area served by such public facilities. Therefore, careful control and guidance of new residential development is critical to protecting the health and safety of current as well as future residents. The County should perhaps consider increasing their staff to handle additional site visits and to provide much-needed design assistance to developers before approving subdivision plans in the Planning Area.

The County may also want to consider the adoption of building or housing codes for administration in the municipalities under their jurisdiction. The adoption of an up-to-date building/housing code could be very beneficial to the Planning Area. Building codes could address health, safety, and water and energy conservation issues which affect all residents. Typically, building codes include provisions addressing plumbing, electrical wiring, fire safety and property maintenance. Requiring all new construction to adhere to these types of standards would at least assure that a minimum level of safety would be built into new and/or improved structures. And, in addition, such a code could require all new or replacement mobile homes to be properly anchored and to be designed to meet applicable fire safety standards.

If however, any of the Planning Area Townships, either individually or as a group, develop local land use control regulations in the future, i.e. zoning and/or subdivision statutes or building codes; such local controls would supersede the County's regulations. As such, the municipalities would then be responsible for administration and enforcement of their own land use principles.

CHAPTER 9.

LAND USE

A. PHYSICAL FEATURES

Since the individual characteristics of landscape and soils determine the most appropriate land uses for a particular location, an inventory of the physical features of an area is a critical component of a comprehensive plan. Ideally, land uses should respect the physical properties of a site. The wasted resources associated with land use failures can be avoided if land uses are suited to a locale's inherent limitations and potentials.

This chapter will review the physical features of the Planning Area, including an examination of its topography and soils, the location of its floodplains and wetlands, and the identity of its natural resources. Existing soil surveys, maps and field observations will then be used to determine the current distribution of land uses within the Planning Area and their appropriateness to specific sites.

1. Topography

Geologic uplift and compression during the Permian Period 200 million years ago set the basic foundation for the landscape in Anthony, Derry Liberty, Limestone and West Hemlock Townships. The area's fundamental topography was altered slightly in the more recent ice ages (60 million years ago) when glacial advance and retreat into Montour County deposited till and outwash material in the interior lowlands. Centuries of geologic change associated with the major drainage ways in Anthony, Derry, Liberty, Limestone, and West Hemlock Townships further smoothed the landscape. Today gently rolling to undulating hills dominate the topography of the Planning Area. Elevations range from a low of 550 feet above sea level near Washingtonville, to a high of almost 1300 feet above sea level in the Muncy Hills which cross the northern sector of the Planning Area. The mountains in West Hemlock Township range from 900-1100 feet and portions of the Montour Ridge in Liberty Township have peaks at an elevation of 1100 feet above sea level.

The Muncy Hills in the northern part of the Planning Area create a ridge that forms the northern end of the Chillisquaque Creek watershed. Additional drainage valleys bisect Valley and West Hemlock Townships in an east-west direction and form channels for the Chillisquaque Creek, Mouses Creek, Beaver Run and Kase Run. The Montour Ridge, running through Liberty Township, forms a major drainage ridge for these waterways and directs them south to the Susquehanna River. Central and other southern

sections of Montour County are drained southward by means of the Mahoning Creek.

Most of the land in the Planning Area should represent only moderate or slight development limitations because of slope. (See Map 2 for an indication of the topography of the Planning Area.) Most building is done on land with less than 15% slope. Although technology exists to overcome the problems associated with locating buildings on slopes greater than 15%, it is prohibitively expensive in many instances. And in other cases, suitable soil depths, as required by the State Department of Environmental Resources for the installation of subsurface sewage disposal systems, are not available on even moderate slopes.

For discussion purposes, the topography of the Planning Area can be divided into three (3) categories of slope; 0-8%, 8-15%, and greater than 15%. These three categories were selected for a number of reasons. The 0-8% slope areas generally present little if any topographic constraints for development. The areas with 8-15% slope can be developed in most cases depending upon engineering design and proper building practices. But, development becomes much more difficult when slopes exceed 15%. Table 51 below illustrates the estimated percentage of land in the Planning Area that falls into each category.

Table 51

Percent of Slope

<u>Development Constraints</u>	<u>Slope</u>	<u>% of Land Area</u>
No Limitations	0-8%	55%
Slight	8-15%	20%
Moderate/Severe	Over 15%	25%

Source: Montour County Soil Survey, U.S. Department of Agriculture, Soil Conservation Service, April 1985; and U.S.G.S. Topographic Maps; and Field Survey conducted by Landplan, Inc. December 1992 and January 1993.

2. General Soils

General soils information for the Planning Area is shown on Map 3, included in this chapter. This information was extracted from the Montour County Soil Survey, compiled by the U.S. Department of Agriculture, Soil Conservation Service, and issued in 1985. Although the detail provided on this map is not sufficient to plan specific building or road sites, it provides general information

about the general location of each major soil association in the Planning Area. Each soil association includes one or more major soils and several minor soils. The associations share qualities and combine to form a distinctive landscape pattern with common soil properties, topography and drainage. Caution should be exercised though when using this map, because within each soil association there can be significant variations in slop, soil depth, drainage patterns, and other characteristics which affect specific site management. This map will also not provide sufficient detail to assist in the management of crop or pasture land in the Planning Area. (Prime farmland and crop and pasture land management will however be discussed in greater detail in a subsequent section of this Chapter.)

* The First soil association, Weikert-Berks-Hartleton can be found in each Township in the Planning Area. It is the predominant soil group in Liberty and West Hemlock Townships covering well over half the land area in these Townships, as well as the northern one-third of Anthony Township.

* Watson-Alvira-Weikert soils also can also be found in each Township in the Planning Area. The landscapes of Anthony and Derry Townships are dominated by this soil group which covers over half of their land areas. The northern tips of Limestone and West Hemlock Townships are covered by this soil association as well, and a band of Watson-Alvira-Weikert soils lying south of Chillisquaque Creek extends into Liberty Township.

* The Hagerstown-Elliber-Edom soils grouping, covers most of Limestone Township and small areas bordering Limestone Township and small areas bordering Limestone Township in Anthony, Derry, and Liberty Townships.

* The fourth and fifth remaining soil associations found in the Planning Area, the Holly-Monongahela-Basher and Buchanan-Laidig groupings, cover small areas within Anthony, Derry, Liberty and Limestone Townships. The floodplain areas adjacent to Beaver Run, Mud Creek and Chillisquaque Creeks lying mostly in Anthony, Derry and Liberty Townships, are covered by Holly-Monogahela- Basher soils. The Montour Ridge areas which extend along the southern border of Liberty Township are characterized by Buchanan-Laidig soil associations.

The general characteristics of the five soil associations are described in the U.S. Department of Agriculture's Soil Survey of Montour County, Pennsylvania, published in 1985. Descriptions of the various soil groupings are as follows.

Weikert-Berks-Hartleton Association – This soil grouping is characterized by gently sloping to steep, shallow to deep, well drained soils on upland ridges; formed in material weathered from shale and some sandstone.

This association makes up about 60% of Montour County. It consists of areas that are deeply dissected by drainage ways.

Weikert soils make up about 23% of the association. They are shallow and are on ridge tops and side slopes. Berks soils make up another 23% of the association. They are moderately deep and are on benches and side slopes of ridges. Hartleton soils make up about 13% of the association. They are deep and are found on rounded ridges. The remaining 41% of the association is made up mainly of Watson, Alvira, and Shelmadine soils in depressions and drainage ways and Bedington soil on uplands.

This association is mainly cropland and pasture. Some areas, mostly in the steeper parts, are wooded and some others are used for building sites. Much of the acreage is suitable for cultivation, and most areas are suitable for woodland and wildlife habitat. The depth to bedrock, slope, erosion and very low available water capacity are the major limitations of the association.

Watson-Alvira-Weikert Association – Characterized by nearly level to steep, deep and shallow, somewhat poorly drained to well drained soils in valleys and on hills and ridges, the soils of this association were formed in material weathered from glacial till and shale.

This association makes up about 20% of the County. It consists of areas that are dissected by broad drainage ways.

Watson soils make up about 35% of the association. They are deep and moderately well drained and are on nearly level to sloping hills and ridges. Alvira soils make up about 30% of the association. They are deep and somewhat poorly drained soils and are in nearly level to sloping valleys. Weikert soils make up about 10% of the association. They are shallow and well drained and are on gently sloping to steep ridges. The remaining 25% of the association is made up mainly of Shelmadine soils in depressions and Hartleton and Berks soils on ridges.

Most of this association is suited to and used for cropland. A seasonal high water table and the depth to bedrock are the main limitations.

Hagerstown-Elliber-Edom Association – This soils grouping is characterized by gently sloping to steep, deep, well drained soils in valleys and on ridges and was formed in material weathered from limestone and calcareous shale.

This association makes up about 8% of the County and consists of areas dissected by broad drainage ways.

Hagerstown soils make up 45% of the association. They are found on limestone ridges. Elliber soils make up about 25% of the association. They are cherty limestone ridges and side slopes. Edom soils make up about 15% of the association and are on ridges. The remaining 15% of the association is made up mainly of Kreamer soils on lower slopes, Evendale soils in depressions, and Opequon soils on rides.

This association supports and is mainly used for crops. Some areas on steep ridges are in woodland. Slope, erosion, and stone fragments in the soils are the main limitations.

Holly-Monogahela-Basher Association – Characterized by nearly level and gently sloping, deep, very poorly drained to moderately well drained soils on flood plains and terraces, this classification was formed in alluvial material.

This association makes up about 7% of the County.

Holly soils make up about 45% of the association. They are nearly level and poorly drained and very poorly drained and are on flood plains. Monongahela soils make up about 20% of the association. They are nearly level and gently sloping, are moderately well drained, and are on terraces. Basher soils make up about 15% of the association. They are nearly level and moderately well drained and somewhat poorly drained and are on flood plains. The remaining 20% of the association is made up mainly of Wyoming and Unadilla soils on terraces and Udifluvents and Fluvaquents and Linden soils on floodplains.

This association is mainly in cropland, woodland, and pasture. Flooding and a high water table are the main limitations.

Buchanan-Laidig Association – This soil association is characterized by nearly level to steep, deep, moderately well drained and well drained soils on mountain side slopes and foot slopes and was formed in colluvial arterial weathered from sandstone and shale.

This association makes up about 3% of the County. It consists of broad areas on mountainsides.

Buchanan soils make up about 40% of the association.

They are moderately well drained and are on the foot slopes. Laidig soils make up about 20% of the association. They are well drained and are on the upper slopes. The remaining 40% of the association is made up

mainly of Weikert, Hartleton, Dekalb, Hazleton, and Berks soils on ridges and Alvira soils on the lower slopes.

This association is mainly in woodland. Some small areas have been cleared for farming, but large stones on the surface interfere with cultivation. A firm underlying layer, slope, slow permeability, and large stones on the surface remain limitations.

3. Farmland Soils

Prime farmland soils make up a significant portion of the Planning Area and represent a limited natural resource worth preserving. Prime farmland has been defined by the U.S. Department of Agriculture as the land that is best suited, due to a combination of physical and chemical factors, to producing food, feed, forage, fiber, and oilseed crops. In addition to producing high crop yields, the use of prime farmland for food production results in the least destruction to the environment. The soils identified as prime farmland soils have the water supply, growing season and soil qualities for long term production when properly treated and managed.

The U.S. Soil Conservation Service has developed criteria to identify prime farmland. Soil units found within the Planning Area which have been identified as prime farmland are identified in Table 52 and are illustrated on Map 4 of this Plan. These soils all have an adequate water supply from precipitation or irrigation; have acceptable acidity or alkalinity levels; few or no stones or rock outcroppings; and, in general, do not exceed a slope of 8%. In addition, all soils identified as prime farmland are not excessively erodible or saturated with water for long periods, nor are they flooded during the growing season.

The prime farmland sectors of the County were located during soil surveys performed by the Soil Conservation Service between 1975 and 1979. At the time of the survey, all of the areas identified as prime farmland were in crops, pasture, woodland or other land available for producing food or fiber. Urban or built up land, or land under water, was not considered prime farmland even if it had appropriate soil qualities. In the years since the survey was initially conducted however it is likely that some of the "prime" soil areas have been developed or are no longer being used for agricultural purposes.

Table 52**Montour County
Prime Farmland Soils**

<u>Capability Class *</u>	<u>Soil Name</u>	<u>Acres**</u>	<u>Percent**</u>
IIe	Albrights silt loam (AbB)	119	0.1
I	Allenwood gravelly silt loam (AnA)	153	0.2
IIe	Allenwood and Washington soils (AoB)	518	0.6
IIw	Basher soils (Bc)	542	0.6
IIe	Bedington silt loam (BeB)	682	0.8
IIe	Buchanan gravelly loam (BuB)	411	0.5
IIe	Edom complex (EdB)	1,061	1.3
IIe	Elliber cherty silt loam (EsB)	519	0.6
III _s	Elliber very cherty silt loam (EtB)	103	0.1
IIe	Hagerstown silt loam, (HaB)	1,741	2.1
IIe	Hartleton channery silt loam (HtB)	1,698	2.0
IIe	Kreamer cherty silt loam, (KmB)	1,015	1.2
IIe	Laidig gravelly loam (LaB)	87	0.1
IIe	Leck Kill shaly silt loam, (LnB)	87	0.1
I	Linden silt loam (Lw)	265	0.3
IIe	Meckesville silt loam (MkB)	139	0.2
IIw	Monongahela silt loam (MoA)	1,124	1.3
IIe	Washington silt loam (WaB)	1,462	1.7
IIw	Watson silt loam (WbA)	1,970	2.3
IIe	Watson silt loam (WbB)	4,198	5.0
I	Wheeling soils, (WsA)	189	0.2
IIe	Wheeling soils (WsB)	75	0.1

* Subclasses are designated by a small letter after Class. The letter “e” indicates a risk of soil erosion unless close-growing plant cover is maintained; the letter “s” denotes a limitation of shallow, droughty, or stony soil; and the letter “w” signifies that water in or on the soil could interfere with cultivation or plant growth without proper management.

** All acreage and percentages refer to Montour County as a whole. All soils listed, except Linden silt loam, are found in the Planning Area.

Source: Montour County Soil Survey, U.S. Department of Agriculture, Soil Conservation Service, April 1985.

The class and subclass of each of the prime farmland soils is also included in Table 52. According to the County Soil Survey, Class I soils have only slight limitations that restrict their use and, as a result, they have no sub-classifications. Class II soils have moderate limitations which reduce the choice of plants or crops or require moderate conservation practices to be used. The sole Class III soil in the Prime Farmland category, Elliber, is generally well suited for pasture or trees, but has restricted crop production use because stone fragments in the soil interfere with planting and tillage. Subclasses for Class II and III soils include erosion, water and soil limitations.

As shown on Map 4, Anthony, Derry, Liberty, Limestone and West Hemlock Townships all have areas of prime farmland soils. The majority of the Prime farmland is located in the central and west central portions of the Planning Area; in southern Anthony and northern Derry Townships and throughout Limestone Township. A rough estimate indicates that there are approximately 16,000 acres of prime farmland soils in the Planning Area Townships, almost 28% of the total land area.

4. Farmland Soil Management

Even excellent soils require proper management to maintain their productivity. Erosion, drainage and fertility, in particular low levels of organic matter in the soils, present difficulties even on land well suited for crop or pasture uses. These challenges are discussed in detail in the County Soil Survey, prepared by the U.S. Department of Agriculture. A summary of the soil management practices presented in the Survey follows, and more detailed information on specific soils can be found in the soil document.

Erosion – The most prevalent soil management problem in Montour County is erosion. Cropland and pastureland in the County suffer from erosion if improperly managed. Erosion can reduce water quality by causing sedimentation of streams and reservoirs, and the loss of topsoil by erosion diminishes the productivity of the soil. This problem is especially apparent in Weikert and Berks soils which are shallow and moderately deep, respectively, and have low available water capacity. Hartleton and Elliber soils, which are layered on sloping areas, are often eroded away leaving a surface layer with a high content of channery and cherty fragments which makes preparing a seedbed and tilling difficult.

Even the most productive soil groups in the Planning Area, Edom, Hagerstown, and Washington soils, are subject to erosion. A protective plant cover for cropland, deferred or rotational grazing for pasture and the use of legumes and grasses can control erosion and conserve the soil in these areas. Incorporating crop residue into the soil can also reduce erosion by adding to the organic content of the soil. Contour farming and terraces, as

well as minimum tillage, can help maintain sufficient soil cover on slight and moderate slopes.

Drainage – Some of the soils in the Planning Area also require artificial drainage for plant production. Shelmadine and Holly soils in particular need artificial drainage and Alvira and Evendale soils must have artificial drainage most years to reduce the soil's water content. (These soils together total more than 13,000 acres in Montour County.) Surface drainage and tile drainage systems can be used together or alone depending on how intensively the soils are farmed and the individual soil's permeability. Finding adequate outlets for such drainage systems can however present some difficulties.

Fertility – Several factors affect soil fertility and crop yields in the Planning Area. For example, high levels of acidity are common on many upland soils. Alfalfa and other crops can not be grown on these soils without the addition of lime to lower the acid levels and add calcium to sufficiently raise the soil's pH level.

Low levels of organic matter are another factor affecting soil fertility. Under these conditions, surface crusting after intensive rainfall is common. This crusting leads to a cycle of erosion since the crust is impervious to water when dry. Fall plowing should be avoided in these areas since most soils under such conditions will be as dense and hard in the spring as they were in the fall. Frequent and regular additions of crop residue, manure and other organic material will reduce crust formation.

Information regarding crop yields for farmland soil units is available in Appendix B of this Plan. It should be noted however that actual yields may vary from the levels indicated because of rainfall and other climatic variations.

5. Floodplains and Wetlands

There are several relatively narrow bands of floodplain in the Planning Area associated with the major creeks and runs bisecting the Study Area. Development should be encouraged to avoid these areas because of their susceptibility to periodic flooding. As participants in the National Flood Insurance Program, flood maps were prepared for each of the Planning Area Townships by the Federal Emergency Management Agency (FEMA). These maps illustrate the areas of each community which would be inundated during a flood of a 100 year frequency. Flood prone areas, as identified by FEMA are shown on Map 5 in this Chapter.

In order to maintain their eligibility in the National Flood Insurance Program, each of the Townships must regulate development occurring in the 100 year floodplain areas of their municipality. During the 1980's, each of the

Planning Area Townships adopted provisions aimed at discouraging the placement of vulnerable developments and the investment of sizeable sums of money in their flood prone areas.

Map 6 illustrates areas containing wetlands or hydric soils. These too are areas where development should be avoided. Wetlands or areas containing hydric soils, soils characterized by an abundance of moisture, are located in almost every case in low-lying areas or areas in close proximity to a stream, watercourse, or other body of water. Wetlands and soils with hydric characteristics are unique environmental resources which are essential to maintaining a sound ecosystem. These areas have several important functions – they act as natural ponding areas to hold flood waters during times of high water; they act as ground water recharge areas; they provide natural cleansing for runoff from agricultural and developmental activities; they provide natural habitat areas for many species of wildlife; and they offer recreational and educational opportunities.

Recently the State's Department of Environmental Resources recognized wetlands as valuable resources and requires replacement of wetlands lost to development. The Department's requirements make development of these areas very difficult and expensive. In order to avoid the inadvertent destruction of these sensitive areas, site development should always include an examination of the soil profile. This could be a key in discovering and identifying the location of hydric soils or potential wetland areas.

6. Natural Resources

As noted previously, Anthony, Derry, Liberty, Limestone and West Hemlock Townships include a significant amount of prime farmland, which should be protected. Further, development incompatible with standard farming practices should be directed away from agricultural sectors of the Planning Area to avoid conflicts and loss of this valuable resource. In addition to an abundance of prime farmland, the rock strata in the Planning Area includes Clinton iron ores, Helderberg limestone, and, in limited amounts, Oriskany sandstone.

Prior to 1900, iron was mined near Danville and in Cooper Township. Geologists estimate approximately 700,000 tons of iron ore were located in two beds in Montour Ridge. Large quantities of iron ore may also be present in Montour Ridge where it crosses the southern portion of Montour County and some ore may be found within the Planning Area in Liberty Township. These iron beds have not been explored further because they are thin and may be very low grade.

Limestone has been quarried in Derry, Liberty and Limestone Townships for many years. In the late 1800's and early 1900's, quarries and lime kilns were clustered around Washingtonville. Limestone quarries continue to operate in Limestone Township today. Quarried stone is used for crushed stone, building stone, flux, and lime.

A very small amount of Oriskany sandstone which produces silica sand is also found in the Planning Area. More abundant sources of silica sand do however exist outside Montour County.

Although there are no brick yards in the Planning Area, an abundance of red shale, excellent for making bricks, is found in the lowlands of each of the five Townships.

B. EXISTING LAND USES

Cropland, pasture and woodland are the predominant land uses in the Planning Area. Overall, existing land uses in Anthony, Derry, Liberty, Limestone and West Hemlock Townships could be considered low intensity or rural in nature. There are no major urbanized areas, only a few small villages scattered throughout the Study Area, and the overall population density is low. (Table 3 in Chapter 3 presents population density in each of the five Townships in 1990 and compares it with population density in 1950.) Although population densities increased dramatically over the past 40 years and total population in the Planning Area increased by over 50% during the same period, the area is still overwhelming rural in character with almost 90% of its land area being used for crop, pasture or woodland purposes.

For planning purposes, the Study Area's existing land uses can be divided into at least seven categories: residential, commercial, industrial, public/semi-public, streets or rights-of-way, agriculture, and woodlands. A brief description and discussion of each category follows, as well as a Table (Table 54) at the end of the chapter which shows the appropriate acreage and percentage of each of the land uses as they exist today. In addition, Map 8 illustrates the location of each of the existing land uses as determined during a field survey conducted by Landplan, Inc. in December 1992 and January 1993.

1. Residential

This category includes all residential uses – single family homes, multi-family dwellings, farm houses and mobile homes, either independent or as part of a mobile home park.

The predominant type of dwelling found in the Planning Area is the single family home, either older farm houses scattered throughout the rural

portions of the Townships or newly-constructed homes in recent subdivisions or developments. Of the 1867 housing units counted in the Planning Area during the 1990 Census, over 73%, or 1,370, were single family detached dwellings. Another 22% of the housing units in the Planning Area, or 402 units, were mobile homes, roughly 1/3 of which were located in two mobile home parks in Derry Township. (See Chapter 8 for further details regarding housing in the Planning Area.)

An assessment of the data collected during the December 1992 and January 1993 field survey indicates that approximately 2,000 acres of land in Anthony, Derry, Liberty, Limestone, and West Hemlock Townships, or about 3.5% of the total land area in the Planning Area, is currently devoted to residential use.

2. Commercial

This category includes all business establishments, including wholesale and retail trade activities, personal service operations, auto and equipment repair shops, professional offices, entertainment enterprises, and restaurants and other food service establishments.

The recent field survey identified at least 55 commercial business establishments in the Planning Area Townships. Although many are located in or near the various village centers, including Limestoneville, Exchange, White Hall, Mooresburg and the Borough of Washingtonville, the field survey also found a substantial number of in-home businesses scattered throughout the five-Township area. (See Appendix C of this Plan for a listing of the Businesses found in each of the Planning Area Townships.)

Although there are no exact figures available to indicate the specific amount of land that is devoted to commercial use, primarily because of the high number of in-home or accessory business activities, it is estimated that only .2% of all of the land area in the Study Area, or \pm 100 acres, is utilized for commercial purposes.

3. Industrial

This category of land use includes all areas utilized for manufacturing, assembling, or processing operations.

The largest tracts of ground being utilized for industrial purposes in the Planning Area are the P.P. & L. Power Plant and its related operations in the Strawberry Ridge area of Derry Township and the Strick Trucking facility in the Village of Ottawa in Limestone Township. Also included in this category are the quarrying operations being conducted by Lycoming Silica Sand and Royer's in Limestone and Liberty Townships.

Approximately 1.0% of the total municipal land area, or about 600 acres, is currently considered as industrial.

4. Public/Semi-Public

Public/semi-public land is area set aside for government and municipal buildings, fire halls, religious and cultural facilities, social or health service operations, parks and recreation areas, cemeteries, publicly-owned or accessible land areas, public meeting places or community halls, and schools or other educational facilities.

The biggest tracts contributing to the acreage in this category are P.P. & L.'s Montour Preserve, the North Montour and Milton Sportsmen's Clubs, the Liberty Valley Country Club, the Montour/Delong Fair Grounds, the Exchange recreational area, and the State Game Lands in Liberty Township. In addition, there are numerous religious, social, and educational facilities located throughout the Planning Area. (See Appendix D of this Plan for a listing of the churches and schools located in the Planning Area Townships.) It is therefore estimated that as many as 1,750 acres, or just about 3% of the Area's total acreage, is devoted to this category of land use.

5. Streets and Rights-of-Way

This category includes all streets, highways, railroads, rights-of-way and easements in the Planning Area used for public access.

As noted in Chapter 7 of this Plan, there are 247.37 miles of public roadways in the Planning Area. Thus, assuming an average 50 foot right-of-way for all of this mileage, the total acreage involved in this category calculates to be about 1,500 acres, or 2.6% of all land area. This percentage will undoubtedly increase in the future as new access ways are constructed to accommodate development in the area.

6. Agriculture and Undeveloped Land Areas

This category includes all those lands used for agricultural purposes, including land used for cultivation, pastureland, or space occupied by buildings providing storage or associated processing facilities, as well as all undeveloped land areas, such as floodplains, wetlands, aquifer recharge areas, streams, ponds, and other similar uses not included in any other category.

A sizeable majority of the Planning Area is devoted to agricultural usage. As pointed out in the soils section of this Chapter, approximately 28% of the total land area in the five-Township Planning Area, or 16,000 acres,

have soils which are classified as prime farmland soils. Most of this area is actively farmed or is being used for agricultural-related activities, such as pasture or grazing land. According to the recent field survey, as much as 60% of the Study Area's total area, or just under 35,000 acres, are devoted to agriculture, agriculture-related, or other undeveloped land uses.

In recent years the total number of farms in Montour County has declined. According to the Montour County Soil Survey, there were approximately 350 farms in the County in 1975. In 1992, the Montour County Cooperative Extension estimated 270 farms, with an average size of 155 acres, remained in the County. Although there was definitely a reduction in the number of farms during this 17 year period, a great deal of the farmland was acquired by P.P. & L. as a part of their power plant project in Derry and Anthony Townships and considerable portions of the land are still being farmed by tenant farmers. Thus, the County's farm loss was not as dramatic as the numbers seem to indicate.

Unfortunately though much of the land suitable for prospective development is land which is presently in agricultural production or has valuable farmland soils. It is anticipated that over the next 10-15 years, acreage in the agricultural land use category will decrease more than any other element. As many as 1,000-1,500 acres could be lost to other forms of development.

One way that farmland can be protected against encroachment is through the establishment of Agricultural Security Areas. In 1982, the PA legislature enacted Act 43 which authorized the establishment of such Areas in the Commonwealth as a means of preserving valuable agricultural acreage. The program allows farmers to petition their municipal governing body to create a Security Area where at least 500 acres of land are involved. The acreage need not be contiguous and can involve several property owners. Participation in a Security Area designation is voluntary and applications must be initiated by the property owner(s). Once the Agricultural Security Area is established, the designation entitles the participating property owners to special consideration from local and state governments. The local government for example may not impose regulations which unreasonably restrict farm structures and practices, nor may normal farming operations be considered a "nuisance" when executed properly or with care. And, State agencies must require special reviews whenever local authorities propose condemning agricultural land in order to ensure that the municipality has explored all reasonable and prudent alternatives.

In 1987, Pennsylvania voters overwhelmingly voted in favor of establishing a \$100 million bond issue for the purchase of agricultural preservation easements. Legislation was then developed which allowed counties to assess, negotiate and purchase the development rights of farms

or farm ground situated in an approved Agricultural Security Area as a further means of preserving the agricultural integrity of the land. Many counties in the State have made the appropriate financial and policy commitments to the program, have created the necessary review boards, and have actually begun purchasing the development rights to farmlands in their jurisdictions.

Agricultural Security Areas have been created in many of the municipalities in Montour County, including four of the Planning Area Township; Anthony, Liberty, Limestone and West Hemlock Townships. (According to the County Cooperative Extension Office, only Derry Township in the Study Area has no farmland set aside in an Agricultural Security Area.) As many as 3,500 acres have been registered in the County Recorder's Office in each of the four participating municipalities. Table 53 presents a breakdown of total acreage registered, by Township, in Agricultural Security Areas and the number of properties involved in the acreage and Map 7 illustrates the location of those sections of the Planning Area included in Agricultural Security Areas.

Table 53

**Planning Area Townships
Agricultural Security Areas**

<u>Township</u>	<u>Acreage</u>	<u># of Properties</u>
Anthony	3,996 acres	32
Liberty	5,479 acres	46
Limestone	3,624 acres	39
West Hemlock	3,579 acres	37
	—————	—————
TOTALS	16,678 acres	154

Source: Montour County, Office of the Register and Recorder, February 1993.

As shown, the acreage protected by Agricultural Security designation in the Planning Area represents nearly half of the total land area estimated as being used for agricultural production (34,470 acres) and almost 29% of the total land area. In addition, over 150 parcels are involved. This represents a tremendous commitment and willingness on the part of residents and property owners in the Planning Area to preserve the quantity and integrity of the area's farmland for future generations. (County records show another 1,948 acres of land in Cooper Township are also part of an approved Agricultural Security Area.)

In addition to the Agricultural Security Program in place at the municipal level, the Montour County Commissioners have also decided to initiate the Purchase of Development Rights Program at the County level to further enhance farmland preservation. The first application period for consideration will be from June 15-July30, 1993. Any farm in an Agricultural Security Area is eligible to apply. All farms applying will be ranked according to their soil suitability and the development pressure each is facing. Farms with better soils will be ranked higher than those with poorer soils and properties being actively pursued for development or those in close proximity to existing development will be given a higher ranking than more rural tracts. After all of the applications are ranked, the County's Farmland Preservation Board will select 1-3 farms or parcels for appraisal. Each farm or parcel selected by the Board will receive two appraisals; one appraisal for the developed value of the land and one for its value as farmland. The difference between the two values will be the amount offered to the property owner. The current County budget includes \$10,000 for the purchase of development rights. This amount will be combined with a \$40,000 grant from the State as part of a 1-4 dollar match. In addition, an outright grant of \$15-20,000 is expected from the State, according to Agricultural Extension staff, to get the County's initiative started.

6. Woodlands

The intent of this category is to separate all woodland areas in the Planning Area from other land uses and to recognize them as a significant use of their own.

It is estimated that as much as 17,500 acres in the Planning Area Townships are forested or covered by trees, approximately 30.2% of the total land area in the Study Area. Much of the woodland area is located along the ridges of Anthony, Derry, Liberty and West Hemlock Townships. Between 30-40% of each of these Townships is wooded. Although there are some wooded areas in Limestone Township, particularly in the Limestone Ridge area in the southern part of the Township, there are probably less than 1,000 acres of woodlands in that municipality.

Conscientiously-applied conservation practices could help preserve this valuable resource for generations to come and could help maintain the natural storm water retention capability and capacity provided by the woodlands.

Table 54 below shows the total acreage of land utilized by each category of land use just described.

Table 54
Planning Area Townships
Existing Land Uses

1993

Developed Land Uses

<u>Land Use</u>	<u>Estimated Acreage</u>	<u>% of Developed Land</u>
Residential	2,000 acres	33.6%
Commercial	100 acres	1.7%
Industrial	600 acres	10.1%
Public/Semi-Public	1,750 acres	29.4%
Streets	1,500 acres	25.2%
TOTAL DEVELOPED	5,950 acres	10.3% of Total Area*

* Total Planning Area acreage = 57,920 acres

Source: U.S. Department of Agriculture, Soil Conservation Service Soil Maps, April 1985; Montour County Tax Maps; and Field Survey by Landplan, Inc., December 1992 and January 1993.

CHAPTER 10.

DEVELOPMENT PLAN

As discussed in Chapter 1 of this Plan, the Pennsylvania Municipalities Planning Code has provided local governments in the Commonwealth with the tools and mechanisms by which the future character of their communities may be guided. By empowering municipalities with the right to prepare, enact and implement local land use control regulations, the State Legislature has sought to provide for the health and general welfare of the State's residents through the development of well-conceived, properly-constructed local controls. These comprehensive planning powers have been vested in local governments so that specific goals and objectives can be determined by individual municipalities in an attempt to best define their own futures. Further, it has been acknowledged that a community can best achieve its goals and objectives when its future strategies and policies are based on established past and present conditions and projected future trends.

Thus, this Plan will endeavor to provide for the health, safety and welfare of existing and future residents of the Planning Area Townships through the establishment of specific goals and objectives regarding development of the region. The goals and their objectives set forth in this Chapter will be based on the conclusions identified in the background chapters of this Plan, Chapters 3-9, and the wishes of the Planning Area residents as interpreted from responses provided in the recently-conducted Public Opinion Survey. Future growth policies and recommendations for achieving the goals will also be presented in this Chapter.

A. STATEMENT OF COMMUNITY DEVELOPMENT OBJECTIVES

It is the overall purpose of this Plan to accomplish the coordinated and harmonious development of the Planning Area Townships and their environs in accordance with the area's present and future needs. Through the identification of a reasonable and thorough set of goals and objectives, and the development of realistic growth policies and Plan recommendations, it is hoped that a solid foundation can be laid upon which the municipal officials of the Planning Area Townships can base their future decisions relating to land use, housing, transportation, and community facilities and utilities.

The overall objective of this Comprehensive Plan is to preserve a pleasant, healthy, safe and convenient environment in Anthony, Derry, Liberty, Limestone and West Hemlock Townships for living, working, recreation and other leisure-time activities.

B. DEVELOPMENT SUITABILITIES AND LIMITATIONS

In order to help formulate realistic goals and objectives to guide the future development of the Planning Area, the Area's growth potentials and its positive attributes were identified and evaluated as were the its limitations and potential constraints for growth. These strengths and weaknesses, and their implications for attracting development to the region are as follows.

GROWTH STIMULI

1. Geographic Location

The five Planning Area Townships are located slightly east of the geographic center of the State. They are contiguous municipalities which occupy almost 70% of the total land area in Montour County, from its northernmost boundaries south to Interstate 80, excluding only Washingtonville Borough and Valley Township. As such, they are all within a comparably short distance of Danville Borough, the seat of Montour County government and employment. Further, they are all within reasonable commuting distance of sizeable industrial centers in the Williamsport, Lewisburg and Bloomsburg areas. Major shopping facilities and recreation areas are also located within easy access of the Planning Area. Thus the Area's location is attractive to potential inhabitants because it combines the benefits of rural living with the conveniences of easily accessible urban areas.

This location also gives the Planning Area quick access to regional and area wide markets, retail outlets and consumers, thereby increasing its appeal for economic development as well as residential growth.

2. Physiographic Relief/Topography

Although there are some rather significant changes in elevation throughout the Planning Area, from a low of 550 feet above sea level near Washingtonville in Derry Township to a high of almost 1200 feet above sea level in the Muncy Hills of Anthony Township and portions of the Montour Ridge in Liberty Township, it is estimated that only 25% of the total acreage in the Study Area has a slope exceeding 15%. Therefore, most of the land in the Planning Area should present only slight to moderate limitations for development due to slope. In fact, as much as 55% of the land area in the five Townships has slopes of less than 8%. The appeal of this gently rolling terrain and varying topography may actually act as stimuli for future growth to individuals looking for a change from monotonous city or urban streetscapes.

3. Community Character/Rural Scenic Qualities

The natural or environmental qualities of an area are considered by many persons when selecting a place to live or buy property. The natural beauty of the Planning Area, from its wooded hillsides and quiet stream valleys to its expansive farm landscapes, all combine to form a very appealing character and quality of life. This character and scenery has undoubtedly been responsible for much of the development in the region today and will likely continue to attract additional residential growth in the future.

4. Community Facilities and Services

Planning Area residents have access to a variety of outstanding community facilities and services, including adequate fire protection, ambulance service, and municipal road and highway maintenance, and excellent healthcare facilities and public and private educational opportunities. Further, a variety of recreational facilities, including the Montour Preserve and several municipal parks, playgrounds and ball fields, are located within reasonable proximity of most Planning Area residents. The availability and quality of these services and facilities could attract additional new families to locate in the region.

5. Accessibility/Transportation Network

Interstate 80 and PA Routes 54, 254 and 642 provide excellent regional as well as inter-municipal access for residents of the Planning Area. PA Routes 44, 45 and the sizeable network of State or Legislative Routes crisscrossing the five Townships provide ample intra-municipal access throughout the region. And, the 133 miles of Township or municipally-owned roadways serve to connect the higher volume highways in the Area with local villages and population centers. This road network is an important support for existing development and will likely impact the location and, to some degree, the intensity of future residential and economic development in the region. Educational facilities, shopping areas, employment centers, as well as social and recreational activities are all readily accessible via an adequate highway network.

GROWTH LIMITATIONS

1. Soil Suitability for On-lot Sewage Disposal

Although a small number of households in the Planning Area are served by the Washingtonville Municipal Sewage Treatment facility, the vast majority of the residents rely on individual on-lot, sub-surface sewage disposal systems to handle their sewage needs. Unfortunately, according to

the County's Soil Survey, many of the soil types found in the Planning Area are unsuitable or present severe limitations for the proper functioning of such sub-surface sewage systems. Over-utilization of poor soil areas for development could lead to serious problems, including malfunctions of many of the systems and contamination of ground water supplies. Since municipal sewer service is not expected to be made available in the most of the Planning Area, the suitability of the soils to satisfactorily accommodate sub-surface sewage disposal systems will likely be a substantial limiting factor for future development.

2. Water Supply

The lack of a public water supply is also likely to effect the amount and intensity of future growth in the Planning Area. The prospects of further growth utilizing on-lot wells are already causing concern regarding the quantity and quality of existing groundwater supplies. Questions have been raised regarding contamination from malfunctioning sub-surface sewage systems, from improper use of pesticides and other agricultural chemicals, and regarding the extensive groundwater clean-up project to be undertaken at the Wire Recovery Plant in Valley Township. Future development could therefore be greatly affected where on-site water supplies are proposed.

3. Lack of Municipal Sewer and Water Utilities

The physiographic constraints and expansive geography of the Planning Area have made it economically impossible to provide municipal sewer or water utilities for the residents of the region. Federal and State monies to fund such projects are in short supply and are generally being directed to urban areas to correct substantial existing problems. While some smaller-scale package sewage treatment facilities or community water supply systems may be designed to accommodate new developments or to alleviate problems in localized areas throughout the five-Township region, it seems probable that the rural segments of the Planning Area will have to continue to rely on individual wells and on-lot sewage systems for the foreseeable future.

4. Floodplains and Wetlands

Although comprising a relatively small percentage of the Planning Area's total land area, floodplains, wetlands and areas exhibiting hydric soils present some limitation for future growth. Improperly designed or constructed buildings which are permitted to be located in a flood hazard area could endanger lives and increase potential flood losses and resulting damages. Encroachment in wetlands or hydric soil areas could lead to the destruction of valuable natural resources and groundwater recharge areas. Locating future growth outside of susceptible floodplain areas and away from identified wetland or hydric soil areas will allow flooding to occur in the space set aside

by nature and should help preserve necessary resources and the overall quality of life for present and future generations.

5. Prime Farmland Soils/Agricultural Security Areas

The figures presented in chapter 9 indicate that there are approximately 16,000 acres of prime farmland soils in the Planning Area, representing nearly 28% of the total land in the five Townships. Recent studies have shown that most of this area is actively farmed or is being used for agricultural-related purposes, such as pasture or grazing land. Further, according to the existing land use survey conducted as a part of this Plan, as much as 60% of the Study Area's total acreage, or just under 35,000 acres, are devoted to agriculture and agricultural-related uses. In order to avoid the loss of these irreplaceable farmlands and preserve this choice of lifestyle for future generations, approximately 17,000 acres in Anthony, Liberty, Limestone and West Hemlock Townships have been set aside as Agricultural Security Areas, thereby significantly reducing their availability and potential for development.

6. Employment Opportunities

Although there are considerable employment opportunities for Planning Area residents in Montour County and in adjoining Northumberland, Columbia and Lycoming Counties, there are very few commercial or industrial employers actually located in the Planning Area. Strick Trucking and P.P. & L. are the largest, employing about 500 persons in total. Recent surveys showed that home occupations and farm-related activities provide employment for the greatest number of residents within the Planning Area. However, since there are a variety of employment opportunities available within easy access of this Area, it is unlikely that the lack of jobs within the Planning Area itself will pose a significant limitation to future development, rather the lack of commercial and industrial development and the attendant traffic, noise, etc. may actually make the Area more attractive for residential settlement.

C. GENERAL GOALS AND OBJECTIVES

The following interrelated goals and objectives have been established by Anthony, Derry, Liberty, Limestone and West Hemlock Townships to guide the development of the Planning Area over the next 10-15 years. (The order of presentation of the goals and objectives is not intended to indicate an order of importance or significance.)

COMMUNITY CONSERVATION/AESTHETICS

GOAL # 1. The peaceful, rural environment and unique scenic qualities of the Planning Area Townships should be preserved for future generations.

Objectives:

- A. Preserve lifestyle choices for present and future Township residents.
- B. Recognize the value of the Area's physiographic relief and unique natural features, including its farms and woodland areas.
- C. Maintain the Area's scenic beauty.

GOAL # 2. Development densities and locations should be guided or directed in order to prevent overcrowding of the Planning Area Townships and to help maintain the character of the communities' different segments.

Objectives:

- A. Recognize the value of and distinct benefits offered by each of the different segments of the Area.
- B. Minimize the actual amount of land area disturbed by development; encourage the preservation of adequate open space.
- C. Encourage innovation and ingenuity in design of new developments; i.e. cluster designs.
- D. Prevent overcrowding or over-utilization of the land; avoid haphazard development.
- E. Avoid incompatible adjacent land uses; encourage appropriate adjoining uses.

LAND USE AND LAND USE CONTROLS

GOAL # 3. Land use policies and regulations should encourage development to locate in the best-suited sections of the Planning Area.

Objectives:

- A. Respect the physical capabilities and limitations of the land and its environment.
- B. Discourage development in environmentally-sensitive sections of the Planning Area; prevent inappropriate development of steep slopes, floodplains, aquifer recharge areas, wetlands, etc.
- C. Maintain healthy living environments.
- D. Avoid potential health hazards from malfunctioning on-site sewage disposal systems and the need for economically unfeasible sewer line extensions.
- E. Assure adequate, reliable, safe water supplies.
- F. Control storm water run-off, soil erosion and sedimentation problems.
- G. Preserve and protect the Area's natural resources, including wildlife habitat areas.

GOAL # 5. Agricultural activities within the Planning Area should be encouraged to continue where possible. Prime farmland should be preserved for agricultural use and agricultural production should be recognized as a viable, necessary economic activity.

Objectives:

- A. Minimize the loss of irreplaceable prime farmland.
- B. Help maintain the rural character of the Planning Area Townships.
- C. Help maintain an important lifestyle choice for present and future Township residents.
- D. Minimize non-farm encroachments in farm-dominant sections of the Planning Area and in areas of prime agricultural soils.

ENVIRONMENT

GOAL # 6. Environmental hazard areas (including wetlands, floodplains, poor soil areas, etc.) and other fragile resource areas (such as aquifer or groundwater recharge areas) should be utilized only in ways which will not create nor increase problems for the Planning Area Townships, their residents, or surrounding municipalities.

Objectives:

- A. Prevent inappropriate development of floodplains, wetlands, and unstable or steep slope areas.
- B. Protect water quality in the Planning Area; preserve the integrity of the Area's streams and groundwater recharge areas.
- C. Reduce potential health hazards.
- D. Ensure coordination of land use policies with sewage facilities recommendations contained in Official Sewage Facilities Plans in place in the Planning Area Townships.
- E. Maintain eligibility and participation in the National Flood Insurance Program.

GOAL # 7. The suitability of the soils of all proposed development sites to accommodate sub-surface sewage disposal systems or the availability of community or package sewage treatment facilities should be demonstrated prior to the approval of proposed development plans.

Objectives:

- A. Reduce potential health hazards caused by malfunctioning or inappropriately installed sub-surface sewage disposal systems.
- B. Avoid development of environmentally-sensitive areas.
- C. Minimize the need for Planning Area Townships to install costly sewage treatment facilities to correct malfunction problems.
- D. Reduce potential for groundwater contamination.

GOAL # 8. Effective storm water management controls should be incorporated into the design of all new developments in the Planning Area.

Objectives:

- A. Avoid erosion and sedimentation problems caused by inappropriate development of steep slopes or inadequate storm water control facilities.
- B. Avoid siltation of Planning Area streams and water bodies caused by uncontrolled storm water run-off.
- C. Maintain stream carrying-capacities and reduce the potential for increased flooding problems.

COMMUNITY FACILITIES & SERVICES
PUBLIC UTILITIES

GOAL # 9. Adequate, accessible public facilities, services and utilities should remain available for all Planning Area residents at a reasonable cost.

Objectives:

- A. Maintain quality, safe living environments.
- B. Achieve maximum utilization of existing public facilities, services and utilities.
- C. Avoid inappropriate and costly extensions of public services and facilities, and avoid unnecessary duplication of services.
- D. Stabilize and minimize costs for public utility services for all users.
- E. Coordinate public and private utility service projects to reduce costs and avoid inappropriate location of major transmission lines.
- F. Expand services and facilities as necessary to meet the needs of existing development and to create additional employment opportunities in the community.
- G. Continue support of volunteer fire protection and ambulance services throughout the Planning Area.
- H. Support efforts to improve emergency dispatch and response in the Planning Area.

- I. Support voluntary recycling efforts by residents of the Planning Area.

GOAL # 10. Quality education and/or educational opportunities should remain available for all Planning Area residents.

Objectives:

- A. Continue to provide the best possible education for the Area's youth and adult population.
- B. Support the Danville Area and Warrior Run School Districts in their efforts to provide quality education and adequate school facilities.
- C. Provide applicable vocational training and retraining opportunities for future employees of the Area.

GOAL # 11. Existing recreational facilities, public areas and community facilities should be adequately maintained to assure their continued use and sufficient open space should be reserved by developers in new subdivisions to provide space for neighborhood recreation.

Objectives:

- A. Continue to enhance the quality of life for Planning Area residents through the maintenance and utilization of recreational facilities.
- B. Provide a variety of recreational or leisure-time programs and activities for various age and interest groups throughout the Planning Area.
- C. Assure the dedication or provision of adequate, accessible space for recreational activities throughout the Planning Area.

TRANSPORTAION

GOAL # 12. An adequate, safe transportation network should be provided and maintained throughout the Planning Area.

Objectives:

- A. Provide for the safe, efficient movement of people and goods through the Planning Area.

- B. Maintain the integrity of the existing street and highway systems by preserving their intended and/or designed carrying-capacities.
- C. Minimize unnecessary or potentially-hazardous traffic conflicts by requiring thorough review of all proposed street and/or intersection plans, including driveways.
- D. Improve existing traffic control and circulation problems.
- E. Reduce costs and maximize benefits of expenditures for street and highway projects by coordinating State and local road and/or bridge improvements projects.

ECONOMIC DEVELOPMENT

GOAL # 13. Commercial, industrial, institutional and other non-residential uses and activities should be promoted or encouraged to locate only in segments of the Planning Area which are designated for such uses.

Objectives:

- A. Preserve the rural character of the Planning Area Townships.
- B. Avoid inappropriate encroachment into agricultural areas.
- C. Support local and regional economies; maintain reasonable employment opportunities within the Planning Area.
- D. Provide adequate, accessible space for commercial, industrial, institutional and other non-residential growth and development in the Planning Area.

HOUSING

GOAL # 14. Suitable, safe residential environments should be maintained and a variety of housing types and styles should be available for Planning Area residents of all ages, family size, and income levels.

Objectives:

- A. Promote the development of a variety of housing types and styles, encompassing all basic forms of housing, including single and two family dwellings, and a reasonable range of multi-family units in

various arrangements, mobile homes on individual lots, and mobile home parks.

- B. Ensure the provision of adequate public services and facilities to accommodate development, including sewage service, water supply, utilities, roadways, etc.
- C. Avoid the safety hazards of dilapidated or poorly maintained housing.

HISTORIC PRESERVATION

GOAL # 15. The heritage of the Planning Area Townships should be understood, respected and protected by all Township policies and initiatives.

Objectives:

- A. Preserve the character, culture and heritage of the Area for future generations.
- B. Recognize the presence of various religious cultures and their contributions to the Planning Area, i.e. the Amish and Mennonite groups.
- C. Promote an awareness and appreciation of the history and culture of the Planning Area.

INTERGOVERNMENTAL COOPERATION

GOAL # 16. Local And regional planning efforts and public sector expenditures should be coordinated to help maximize the effectiveness of such investments, to provide for orderly growth and development, and to foster pleasant, safe living environments throughout the Planning Area and Montour County as a whole.

Objectives:

- A. Promote harmonious, coordinated land development throughout the Planning Area and surrounding municipalities.
- B. Maintain positive working relationships with municipalities participating in the Montour County Council of Governments, as well as the County and State governments; open lines of communication regarding all types of public investments.

- C. Provide efficient government.
- D. Encourage competent, equitable administration of land use control and building permit regulations.
- E. Provide a variety of opportunities to better serve the future needs of the County's population.

D. FUTURE GROWTH POLICIES AND RECOMMENDATIONS

This segment of the Development Plan outlines what are considered to be the most effective strategies for achieving the goals and objectives identified in the preceding Section for the Planning Area Townships. Based on the conclusions drawn from Chapters 3-9 of this document and the general development goals and objectives set forth above, a set of specific growth recommendations has been developed for each of the established goals. An attempt has been made to keep the recommendations as brief as possible to avoid presenting regulatory provisions which are more appropriately located in implementing ordinances.

The recommendations outlined below (not necessarily in order of importance) are intended to provide direction or policies to guide the growth of the Planning Area Townships. (The goal statements are repeated from the previous Section in this Chapter to emphasize their importance and relationship to the recommendations.)

COMMUNITY CONSERVATION/AESTETICS

GOAL # 1. The peaceful, rural environment and unique scenic qualities of the Planning Area Townships should be preserved for future generations.

GOAL # 2. Development densities and locations should be guided or directed in order to prevent overcrowding of the Planning Area Townships and to help maintain the character of the communities' different segments.

Recommendations:

1. Develop land use control regulations, i.e. a joint municipal Zoning Ordinance and a joint municipal Subdivision and Land Development Ordinance, that consider the character of the various segments of the Planning Area Townships and provides growth accordingly.

2. Avoid the mixing of incompatible land uses, yet maintain neighborhood conveniences and a variety of employment opportunities through the development of well-conceived land use regulations.
3. Require appropriate buffer areas or screen plantings in municipal land use regulations to ensure the compatibility and protection of adjoining land uses.
4. Encourage the removal, isolation and/or screening of all man-made scenic eyesores, including junk yards, auto salvage operations, or other similar facilities. Consider sponsoring an annually "Community Clean-up Campaign".
5. Encourage the use of aesthetically-pleasing landscaping techniques to enhance the visual quality of the environment of the Area.
6. Encourage underground utility placement in new developments when feasible, or require blending of the Utilities with the natural environment of the site.
7. Minimize the total area disturbed by development and retain open space and/or agricultural land throughout the Planning Area by encouraging cluster or other innovative development designs for major new subdivisions.
8. Conserve the amount of land needed to accommodate future residential growth by requiring developers to install community sewage systems to serve their developments and offering them reduced lot size incentive to do so.

LAND USE AND LAND USE CONTROLS

GOAL # 3. Land use policies and regulations should encourage development to locate in the best-suited sections of the Planning Area.

GOAL # 4. Land use policies and regulations should respect current municipal residents and property owners and avoid creating economic hardship or inequities for them as development occurs.

Recommendations:

1. Develop land use control regulations which give major consideration to the capacity of the area's natural resources, including soils, water supply, etc. to accommodate new development.
2. Protect the integrity of residential areas by developing land use control regulations which will limit encroachment from incompatible land uses.

3. Require developers to provide, at their expense, all services and utilities, including sewer and water supplies, necessary to serve the residents of their developments.

4. Encourage well-planned developments to locate in the Planning Area as a means of protecting property values and avoiding economic hardships for existing residents. Thoroughly review all subdivision and land development proposals to ensure that developers adequately provide for all necessary improvements.

5. Identify wildlife habitat areas in the Planning Area Townships and protect these natural resources through the establishment of sensitive land use control regulations.

6. Administer and enforce land use control regulations in an equitable, consistent fashion throughout the Planning Area.

7. Consider the need to adopt nuisance ordinances to regulate various nuisance occurrences.

GOAL # 5. Agricultural activities within the Planning Area should be encouraged to continue where possible. Prime farmland should be preserved for agricultural use and agricultural production should be recognized as a viable, necessary economic activity.

Recommendations:

1. Minimize non-farm encroachments in agricultural segments of the Planning Area through the development of well conceived land use control regulations.

2. Encourage "Clean and Green" tax benefit enrollments as a means of preserving areas of prime farmland soils.

3. Promote the creation of "Agricultural Security Areas" and encourage participation in the County's "Purchase of Development Rights" program to protect farmland from development pressures.

4. Encourage participation in the PA Farmers' Association or other farm-related organizations, and various land conservation groups, i.e. the Northcentral PA Conservancy.

ENVIRONMENT

GOAL # 6. Environmental hazard areas (including wetlands, floodplains, poor soil areas, etc.) and other fragile resource areas (such as aquifers or groundwater recharge areas) should be utilized only in ways which will not create nor increase problems for the Planning Area Townships, their residents, or surrounding municipalities.

Recommendations:

1. Prepare land use control regulations which discourage utilization of environmentally-sensitive areas.
2. Require developers to provide sufficient documentation, along with their subdivision plans, to illustrate an assessment of the possible environmental concerns of the development site.
3. Protect known groundwater recharge areas by restricting the type and intensity of development in these areas. Require developers to undertake hydro geologic studies where there are known water quantity problems, or in an attempt to avoid adverse impacts on the water supply of adjoining properties.
4. Assure that development located in floodplain areas complies with all National Flood Insurance Program regulations and provisions of the State Floodplain Management Act.

GOAL # 7. The suitability of the soils of all proposed development sites to accommodate sub-surface sewage disposal systems or the availability of community or package sewage treatment facilities should be demonstrated prior to the approval of proposed development plans.

Recommendations:

1. Maintain an effective, up-to-date sewage facilities planning and permitting program throughout the Planning Area.
2. Require developers to submit, along with their subdivision plans, sufficient documentation to show that the method of sewage disposal proposed will be adequate and will not cause adverse effects on adjoining properties.

3. Consider the need to institute a septage management program for unsewered areas of the Planning Area experiencing sub-surface sewage system malfunctions in order to ensure long-term soils viability.

GOAL # 8. Effective storm water management controls should be incorporated into the design of all new developments in the Planning Area.

Recommendations:

1. Identify existing drainage or run-off problems in the Township and develop a strategy and schedule to correct them.

2. Require storm water management controls to be incorporated into the design of all new subdivisions. Require developers to submit the necessary documentation and calculations to show that their proposed controls will be adequate and will not cause adverse impacts on adjoining properties.

3. Require developers to provide a performance guarantee to ensure proper construction and installation of storm water facilities.

COMMUNITY FACILITIES AND SERVICES
PUBLIC UTILITIES

GOAL # 9. Adequate, accessible public facilities, services and utilities should remain available for all Planning Area residents at a reasonable cost.

Recommendations:

1. Achieve maximum utilization of existing public utilities by encouraging development to locate in areas where such utilities are already located.

2. Endeavor to provide for community facilities and services and public utilities in an orderly and timely fashion by establishing an annual capital improvements program reflecting the need for municipal services or public facility projects in the municipal budget of each Township.

3. Pursue State and Federal grant assistance programs to provide cost-effective and financially-feasible community projects.

4. Coordinate, to the extent possible, all public utility installation projects with existing or proposed road or highway improvement projects.

5. Require developers to provide, at their expense, all service and utilities necessary to serve the residents of their developments. Require developers to provide or donate right-of-way easements for public utilities through new developments, where appropriate.

6. Evaluate the current level of police protection provided for the Planning Area Townships by the PA State Police. If determined inappropriate, explore the costs and benefits of establishing a regional, municipal police department in conjunction with other area communities.

7. Maintain the current level of fire and ambulance protection provided by the various local Volunteer Fire Companies, and the Danville and Turbotville Ambulance Companies.

8. Increase citizen awareness of potential fire hazards and emergency medical techniques (i.e. CPR) by supporting public education programs sponsored by local or regional fire or emergency personnel.

9. Coordinate planning for flood emergencies, hazardous materials emergencies and medical emergencies with neighboring municipalities, local and County Emergency Management personnel and applicable service providers. Establish appropriate procedures for response and mitigation of potential disaster situations.

10. Support the establishment of an emergency 911 identification and dispatching system for Montour County.

11. Maintain current, realistic plans for handling and disposing of solid waste generated within each municipality by residents, businesses and industries, including policies promoting recycling efforts and arrangements for periodic collection and disposal of "white goods".

12. Regulate the location of hazardous materials storage and facilities through the adoption of local land use control regulations.

GOAL # 10. Quality education and/or educational opportunities should remain available for all Planning Area residents.

Recommendations:

1. Support the Danville and Warrior Run Area School Districts in their efforts to provide quality education for district students and adequate

- school facilities. Emphasize the importance of academic achievement for students.
2. Support the many college and extension training and re-training courses offered by the two and four-year institutions in the area as a means of maintaining a skilled work force in the Planning Area.

GOAL # 11. Existing recreational facilities, public areas and community facilities should be adequately maintained to assure their continued use and sufficient open space should be reserved by developers in new subdivisions to provide space for neighborhood recreation.

Recommendations:

1. Determine the interest in and feasibility of providing for additional recreational activities within the Planning Area to increase the variety of recreational opportunities available for residents. Examine the possibilities of developing such facilities on a multi-municipal basis to maximize investments. If sufficient interest is generated, develop a plan and/or establish a schedule to address the identified activities.
2. Require developers to provide (open space/recreation areas in new developments.

TRANSPORTATION

GOAL # 12. An adequate, safe transportation network should be provided and maintained throughout the Planning Area.

Recommendations:

1. Encourage through review by PADOT of all proposed new access points along State-owned collector or arterial highways (especially PA Routes 44, 45, 54, 254, 642) to avoid creating potentially unsafe intersections and situations. Review development plans from this standpoint as well to ensure coordination with individual Township highway plans and projects.
2. Require municipal Driveway Permits for the construction of all new driveways onto Township roads or alleys. Utilize the Driveway Design Guidelines contained in the Montour County Subdivision and Land Development Ordinance (until such standards can be incorporated into local land use control regulations) as a means of assuring the safety of such installations.

3. Require developers to design and construct new streets in accordance with applicable Township standards. Also require developers to address the impact of their proposals on the existing street system at the development site.

4. Separate pedestrian and vehicular circulation routes to the extent possible, particularly in the vicinity of places of public assembly, to avoid creating safety hazards.

5. Require the design of all new subdivisions to provide adequate access for emergency vehicles.

6. Develop standards in local land use control regulations for the provision of adequate off-street parking and/or loading areas in new developments.

7. Monitor State and County transportation policies as they relate to proposed or potential improvement projects in the vicinity of the Planning Area to coordinate State and local planning efforts and to determine their possible impact on the municipality.

8. Formalize the on-going improvement/maintenance programs for all municipally-owned roads and bridges throughout the Planning Area, identifying by year those projects intended for completion. Consider the development of a capital improvements program in each Township to assist with budgeting for the purchase of road maintenance equipment and identification of potential funding sources.

9. Periodically review all existing road directional and speed limit signs and determine their adequacy and consistency. Adjust or increase where appropriate.

10. Coordinate road improvement projects with utility installation projects.

ECONOMIC DEVELOPMENT

GOAL # 13. Commercial, industrial, institutional and other non-residential uses and activities should be promoted or encouraged to locate only in segments of the Planning Area which are designated for such uses.

Recommendations:

1. Encourage a variety of employment opportunities for Planning Area residents while preserving a healthful and pleasant environment.
2. Design land use control regulations to avoid residential encroachment into areas designated for commercial and industrial development and vice versa to ensure the integrity of each type of activity.
3. Incorporate provisions addressing density, lot coverage, setback and/or buffering, and sign controls in municipal land use regulations to protect adjoining uses and foster the continuity of existing neighborhoods.
4. Work with existing economic development agencies (including the Danville Area Chamber of Commerce and SEDA-COG) to explore the possibilities for new economic development in the appropriate locations throughout the Planning Area.

HOUSING

GOAL # 14. Suitable, safe residential environments should be maintained and a variety of housing types and styles should be available for Planning Area residents of all ages, family size and income levels.

Recommendations:

1. Design land use control regulations to provide for all basic forms of housing in order to offer a choice of life styles for Planning Area residents of all ages, family size and income levels.
2. Protect the integrity of residential areas by developing land use control regulations which will limit encroachment from incompatible land uses.
3. Preserve the character of residential areas by developing land use control regulations which will limit encroachment from incompatible land uses.
4. Consider the adoption of a Building/Property Maintenance Code to establish minimum standards for maintenance of properties and provisions for the removal of unsafe or dilapidated structures throughout the Planning Area Townships.
5. Investigate the availability of housing assistance funds or programs to assist in the rehabilitation of homes, particularly those owned by

residents of low or moderate income, as a means of protecting the existing housing stock and maintaining exterior structure appearances.

6. Consider the adoption of a building code to regulate the safety of new construction, including fire safety for multi-story and other multi-family dwelling structures.

HISTORIC PRESERVATION

Goal #15. The heritage of the Planning Area Townships should be understood, respected and protected by all Township policies and initiatives.

Recommendations:

1. Work with local and regional historic organizations and knowledgeable local historians to develop a history of the Planning Area and consult it when new projects are proposed.

2. Investigate the benefits of regionalizing services such as police protection, public utilities, sewage permit issuance, cultural or recreational facilities and programs, transportation, etc.

3. Maintain the close working-relationship and idea-exchange forum made possible by the creation of the Montour County Council of Governments. Encourage participation by all County municipalities.

4. Work closely with the County Planning Commission staff and County Conservation District personnel to review and evaluate all subdivision plans proposed in the Planning Area. Streamline the process of evaluating plans by developing a checklist.

5. Maintain a close working relationship with County Planning Commission staff in order to stay abreast of pending programs and land use issues that may impact the Planning Area.

6. Encourage participation in and budget dollars for attendance at State or locally-sponsored training seminars or workshops for joint municipal planning commission members.

E. FUTURE LAND USE PLANNING CONCEPTS

Specific long-range or future growth recommendations or concepts related to land use in the Planning Area are identified in this segment of the Development

Plan. These concepts are based on an evaluation of existing land uses and associated patterns, projected population increases and estimated future land requirements for basic types of anticipated uses, the functional suitability of the land, and the Planning Area's goals and objectives.

The planning concepts and land use recommendations represent and estimate of the type and amount of development that is likely to occur in the Planning Area Townships based on the strengths and constraints identified in Section B. of this Chapter. This Plan does not encourage major growth in any of the Study Area Townships, but does provide for some limited residential, commercial and light industrial development in the future. The land use recommendations recognize and emphasize the importance and value of maintaining the Area's rural, agricultural character for future generations.

GENERAL CONCEPTS

- * The inventory of existing land uses shows that the majority of the land in the Planning Area is classified as agriculture. Woodland is the second largest land use and residential activity represents a distant third. Added together, activity represents a distant third. Added together, undeveloped land uses account for about 90% of the total land area in the five-Township Study Area, while developed uses occupy only 10% of the Planning Area acreage.
- * Most of the soils in the Planning Area have been identified as being generally unsuitable for sub-surface sewage disposal systems which could significantly influence the type and location of future growth occurring in the region.
- * Floodplains, wetlands or hydric soil areas, and a few steep slope areas (areas with slopes exceeding 15%) will also render portions of the Study Area unsuitable for future development.
- * Future growth will also be impacted by the fact that almost one third of the Planning Area's total acreage is included in designated Agricultural Security Areas.
- * Population projects for the next 10-15 years indicate only low to moderate growth is expected throughout the Planning Area. Growth rate estimates range from a low of 4% per decade in Limestone Township to a high of 10% per decade in Derry Township.
- * Land use patterns in the Planning Area over the next decade will likely remain pretty similar to those in place today as a result of the factors itemized above. It is anticipated that some additional land area will be needed for residential purposes, primarily single family uses, and for limited commercial and light industrial development, but agricultural and woodland uses will

continue to dominate the landscape. There may also be some demand for additional seasonal or recreational development, associated with the Montour Preserve or some of the more accessible wooded segments of the Montour Ridge.

* The goals and objectives established for the Planning Area indicate a strong desire to maintain the existing land use patterns in the future and a fervent hope that future uses will consider the capacity of the land to adequately accommodate them. To this end, officials and citizens of the five Township Area have emphasized their desire to preserve the agricultural character of the Area and minimize the environmental impacts which will be caused by additional development.

* Future recommendations and plans therefore recognize seven likely land use categories for the Study Area and the physical relief or soil properties which will undoubtedly effect their location.

FUTURE LAND USE RECOMMENDATIONS

It is recommended that Anthony, Derry, Liberty, Limestone and West Hemlock Townships be divided into the following seven categories of land use for planning purposes:

1. Residential
2. Village Center
3. General Commercial
4. Light Industrial
5. Public/Semi-Public
6. Agriculture and Open Space
7. Woodland

Specific recommendations for the location of each land use can be found on Map 9, the Future Land Use Recommendations Map, in this Chapter. (This map could also serve as the basis for the development of a Joint Municipal Zoning Ordinance for the Planning Area Townships.)

A brief description of the purpose of each of the categories and their potential sub-categories is as follows.

1. Residential

* Rural Residential. Areas should be identified within the Planning Area to provide for scattered, low density, rural residential land uses which are adjacent to but not encroaching on prime agricultural soils or other essential open space or environmentally-sensitive areas. Development in these areas

should be encouraged to be clustered to avoid destroying the agricultural potential of the parent tract.

* Low Density Residential. Space should be provided for the orderly expansion of low density, single family detached residential development in those portions of the Planning Area where municipal sewer and water facilities are not available nor are anticipated in the foreseeable future. New developments in these areas might however be served by package sewage treatment systems and/or a community water supply.

* Moderate Density Residential. Sections of the Planning Area should be set aside to meet the demands of higher density residential uses, including single family attached and multi-family housing developments and mobile home parks. Areas designated for these uses should have access to community or municipal sewage disposal and/or water supply systems.

2. Village Center

The integrity of the existing village areas, including Mooreburg, White Hall, Exchange, and Limestoneville, should be preserved and protected for future generations. These areas should be able to accommodate a variety of compatible activities, such as residential and small business uses, professional offices, churches, government buildings, as well as social or cultural facilities, while still maintaining a small town or village atmosphere. Some moderate intensity residential uses could perhaps be located in these areas if community or municipal sewage and/or water supply systems are made available.

3. General Commercial

Some space outside of designated Village Center areas should be provided for the location of wholesale and retail business activities (businesses which serve the local need for goods as well as those oriented towards the traveling public) and service establishments. Where appropriate, these businesses should be served by community or municipal sewer and/or water supply systems. Adequate arrangements should also be made for off-street parking and loading areas and special care should be given to assure that safe access is provided into and out of such establishments.

4. Light Industrial

Some area should be designated in the Planning Area for the location of light industrial or enclosed manufacturing operations. These areas should be served by package or municipal sewage disposal systems and adequate water supplies, as well as all other essential utilities. They should be situated within reasonable proximity of one of the Study Area's major collector or arterial highways and should

be of sufficient size to assure that all necessary parking, loading access drive and buffer requirements can be met.

5. Public/Semi-Public

Although many of the activities typically classified as public/semi-public uses (churches, schools, government buildings, recreational facilities, etc.) can be accommodated within several of the categories described in this section, a separate classification should be identified to individually accommodate some of the larger recreation areas or uses in the Planning Area, including the Montour Preserve, State Game Lands No. 115, the Milton and North Montour Sportsmen's Clubs, the Liberty Valley Country Club and DeLong Fair Grounds.

6. Agriculture and Open Space

Areas with prime farmland soils or soils capable of producing agricultural or horticultural products and areas accommodating agriculturally-related activities, including pasture or grazing lands, as well as other environmentally-sensitive areas, such as floodplains, wetlands, and hydric soil or aquifer recharge areas, should be reserved for such uses as a means of preserving the integrity of these natural resources for future generations. Any development which would substantially interfere with these uses should be discouraged.

7. Woodlands

Woodland areas should be set aside from the other land uses and recognized as a significant use in their own right. These natural resources should be protected from inappropriate encroachment or development or from mismanagement to avoid their destruction or elimination. Such areas will continue to provide space for various types of recreational activities and as natural wildlife habitat areas.

Acreage allocations for each of the proposed land use categories as compared to the existing acreage occupied by these uses are as follows.

Table 55
Planning Area Townships
Comparison of Existing & Proposed Land Use Allocations
1993-2010

Land Use	EXISTING		PROPOSED	
	Acreage	% of Total Land Area	Acreage	% of Total Land Area
Residential	2,000	3.5%	2,500	4.3%
Commercial	100	.2%	150	.3%
Industrial	600	1.0%	1,000	1.7%
Public/Semi-Public	1,750	3.0%	2,000	3.5%
Streets/Rights-of-Way	1,500	2.6%	1,600	2.8%
Agriculture	34,470	59.5%	33,670	58.1%
Woodland	17,500	30.2%	17,000	29.3%
TOTAL	57,920	100.00%	57,920	100.0%

Source: Field Survey by Landplan, Inc., December 1992 and January 1993 and Future Land Use Recommendations Map (Map 9 of this Plan).

F. EFFECT ON ADJACENT MUNICIPALITIES

During formation of the Future Growth Recommendations for the Planning Area, consideration was given to the development policies and land use control regulations in place in each of the adjoining municipalities, particularly as they relate to development immediately adjacent to the five Planning Area Townships. The table below illustrates the respective policies and controls that each municipality currently follows.

Table 56

**Land Use Control Policies & Regulations
Adjacent Municipalities**

1993

Township/Borough	Comprehensive Plan Or Land Use Policy	Subdivision Ordinance	Zoning Ordinance
<u>MONTOUR COUNTY</u>			
Valley Township	Township Comp. Plan	Township	Township
Mahoning Twp.	Township Comp. Plan	Township	Township
Washingtonville	County Comp. Plan	County	County
Cooper Township	County Comp. Plan	County	County
<u>NORTHUMBERLAND COUNTY</u>			
Lewis Township	County Comp. Plan	County	Township
Turbot Township	Township Comp. Plan	Township	Township
E. Chillisquaque Twp.	County Comp. Plan	Township	Township
Point Township	Township Comp. Plan	Township	Township
<u>COLUMBIA COUNTY</u>			
Hemlock Township	Township Comp. Plan	Township	Township
Madison Township	County Comp. Plan	Township	None
<u>LYCOMING COUNTY</u>			
Moreland Township	County Comp. Plan	County	County
Muncy Creek Twp.	Township Comp. Plan	Township	Township

Source: Montour, Northumberland, Columbia and Lycoming County Planning Commissions, May and June 1993.

After briefly reviewing the land use controls and policies in effect in each of the municipalities noted above, it can be stated that there are no significant conflicts between the Future Land Use Recommendations being presented in this Plan for Anthony, Derry, Liberty, Limestone and West Hemlock Townships in Montour County and any of the existing development policies in effect in the municipalities surrounding the Planning Area.

There are subdivision regulations in effect in all of the municipalities, either administered locally or by the respective County Planning Commission. Zoning regulations are also in effect in all but one of the contiguous municipalities; only Madison Township in Columbia County is currently without such controls. And, exactly half of the communities have adopted local Comprehensive Plans; the other half would fall under the land use policies established by their County Planning Commissions.

The surrounding municipalities, particularly where they adjoin the Planning Area, are primarily agricultural, wooded and residential in nature. There should therefore be little if any conflict in land use or growth recommendations where the Townships or municipalities share common boundaries.

G. INTERRELATIONSHIP OF THE PLAN COMPONENTS

The various components of this Plan are interrelated from beginning to end. The Background Chapters, Chapters 1-9, present and evaluate current conditions and land use activities in the Planning Area; the goals established in Chapter 10 set forth the Area's desires regarding the type, location and intensity of future development to be encouraged; the objective statements, following in goals in Chapter 10, describe the intent or purpose of each goal; and the recommendations, also included in Chapter 10, suggest specific ways in which the goals may be achieved. Chapter 11 will identify specific strategies and set forth a timetable for implementing the goals. In other words, the goal statements represent "what" Planning Area officials would like to see accomplished in their Townships in the future; the objectives explain "why" each goal is important; the recommendations, "how" each goal might be achieved; and the implementation strategies, "when" the recommendations should be addressed. As stated several times throughout this document, the intent of the Planning Area Townships is to provide for future growth in the region in such a way that will preserve the pleasant, rural characteristics of the area and maintain the present quality of life.

CHAPTER 11.

IMPLEMENTATION STRATEGIES

Preparing and adopting a Comprehensive Plan are only the first steps in the municipal planning process. Utilization and implementation of the plan's recommendations are the other steps; perhaps the most important aspects of the process. Even though a plan can identify existing problems and opportunities to correct them, the Plan can only be effective if its recommendations are followed. This Plan's recommendations are intended to help guide future growth in Anthony, Derry, Liberty, Limestone and West Hemlock Townships. Its effectiveness will therefore be directly related to how often it is utilized by public officials and private individuals and organizations. In this case, the Northern Montour Regional Planning Commission and the individual Township Boards of Supervisors must take primary responsibility for implementation of the Plan's goals and objectives. They must continue to coordinate with neighboring municipalities, County Planning personnel and other governmental agencies which address or regulate development in the region, including the PA Department of Community Affairs and PA Department of Environmental Resources, while taking action within the Planning Area to implement the Plan's recommendations.

This Chapter lists short and long term actions designed to promote or achieve the goals and objectives specified in Chapter 10. Potential funding methodologies are also discussed and reviewed at the conclusion of this Chapter.

A. LAND USE CONTROL REGULATION RECOMMENDATIONS

As stated in Chapter 1, a Comprehensive Plan does not carry the weight of a law; it is but a series of recommendations or policies aimed at guiding decisions regarding the physical development of a community or region for the foreseeable future. Therefore, land use regulations or legal documents must be developed to achieve the goals, objectives and recommendations set forth in a Plan. Land use control regulations are the best tools available to help guide the future development of a community or region and implement the recommendations made in a Comprehensive Plan. Such controls can include both zoning and subdivision regulations. Simply defined, subdivision regulations direct or control how a piece of land is divided or laid out in lots while zoning regulations establish the specific type of uses which may occupy a lot or may be located in a given zoning district.

Since there are no local zoning or subdivision regulations in effect in any of the Planning Area Townships at the present time, all five of the Study Area Townships come under jurisdiction of the Montour County Zoning Ordinance and the Montour County Subdivision and Land development Ordinance when development is proposed. The County Zoning Ordinance establishes the appropriate minimum lot

size and other dimensional requirements to be applied in each case, as well as the specific uses which may be permitted in a given zoning district. The County Subdivision and Land Development Ordinance, on the other hand, sets forth the procedure for arranging the proposed lots or development and establishes the standards for design and construction of all appropriate improvements. The County Planning Commission and its staff handle administration and enforcement of both of these Ordinances, which were originally enacted by the County Commissioners in 1968 and 1973, respectively. The County Zoning Ordinance was most recently updated in 1972 and the County Subdivision and Land Development Ordinance, in 1992. If desired however, any of the municipalities in the County can prepare, adopt and administer their own local zoning and/or subdivision regulations which would supersede the County's involvement in such matters.

Zoning regulations focus on the capacity of the land, its soils, slope, and the location of existing and projected infrastructure (sewer and water supply lines, utilities, highways, etc.) to determine the most suitable location for different types of land uses. In this case, since so many of the Planning Area's goals and objectives can be achieved by directing future land uses to specific segments of the municipalities, the development of a Joint Municipal Zoning Ordinance seems to be a logical step and is therefore recommended.

Several cautions should be observed though during the development and administration of a Joint Municipal Zoning Ordinance. First, it is important that the Zoning Ordinance preserve the rights of existing land owners, while at the same time it furthers overall area wide goals and fosters balanced growth. Secondly, the administration and enforcement of the Ordinance must be consistent and equitable. And lastly, the Joint Municipal Zoning Ordinance, like this Joint Municipal Comprehensive Plan, should be periodically reviewed and, if necessary, revised to reflect changing conditions or new growth philosophies. Refinements may also need to be made as the Ordinance is actively used by the Planning Area Townships and their citizens.

Following development of the Joint Municipal Zoning Ordinance it is recommended that the Planning Area Townships prepare and adopt a Joint Municipal Subdivision and Land Development Ordinance. Such regulations would allow the Townships in the Study Area to have control over the design and style of developments occurring within their municipalities. Further, such land use controls would provide the Townships with the opportunity to work directly with developers as they create streets, storm water management facilities, utilities, etc. which may ultimately be dedicated to the communities for ownership and maintenance. Many of the same cautions should be observed when developing and enforcing subdivision regulations as were identified above for the preparation of zoning provisions. IN particular, administration must be handled equitably and uniformly and the regulations should be amended or updated when necessary to reflect changes in major utility installations (sewage disposal or water supply facilities) or new development techniques. Until a Joint Municipal Subdivision and Land

Development Ordinance can be adopted for the Planning Area however, each Township should play an active role in reviewing and commenting on subdivision and land development proposals located in their municipality in order to determine their consistency with the goals and objectives of this Plan.

B. PRIORITIES AND IMPLEMENTATION SCHEDULE

The Planning Area Townships do not have the capacity to immediately undertake all of the recommendations included in Chapter 10. Therefore, as a means of prioritizing the schedule for implementation of the Plan's proposals, the strategies have been divided into two categories; short-term and long-term implementation. Each of the recommendations in the short-term category should be undertaken within one year after adoption of the Plan. Those identified as long-term strategies should be considered for implementation within one to five years after the Plan is enacted.

The proposed actions have been further separated into categories which identify potential budgetary impacts for the Study Area communities. Specific responsibilities for addressing each strategy should also be assigned to the applicable municipal agency, group, personnel or individual by each participating Township. The Northern Montour Regional Planning Commission would be the likely organization to undertake the study of most of the recommendations, as well as preparation of Joint Municipal Zoning and Subdivision Ordinances. However, ad hoc groups or committees of interested citizens could also be organized and appointed to assist with implementation of many of the proposed actions. (The strategies are not presented in order of importance within each category, but are intended to generally follow the same sequence or order as the goals, objectives and recommendations contained in Chapter 10.)

SHORT-TERM IMPLEMENTATION STRATEGIES

With Limited Budget Impact

1. Consider sponsoring an annual "Community Clean-up Campaign". Encourage property owners to remove or screen all unsightly areas, including junk yards, auto salvage operations, or other similar facilities.
2. Encourage well-planned developments to locate in the Planning Area as a means of protecting property values and avoiding economic hardships for existing residents. Thoroughly review all subdivision and land development proposals to ensure that developers adequately provide for all necessary improvements.

3. Minimize the total area disturbed by development and retain agricultural land and/or open space throughout the Planning Area by encouraging cluster or other innovative development designs for major new subdivisions.
4. Encourage “Clean and Green” tax benefit enrollments as a means of preserving areas of prime farmland soils.
5. Promote the creation of “Agricultural Security Areas” and encourage participation in the County’s “Purchase of Development Rights” program to protect farmland from development pressures.
6. Encourage participation in the PA Farmers’ Association or other farm-related organizations, and various land conservation groups, i.e. the Northcentral PA Conservancy.
7. Assure that development located in floodplain areas complies with all National Flood Insurance Program regulations and provisions of the State Floodplain Management Act.
8. Maintain an effective, up-to-date sewage facilities planning and permitting program throughout the Planning Area.
9. Increase citizen awareness of potential fire hazards and emergency medical techniques (i.e. CPR) by supporting public education programs sponsored by local or regional fire or emergency personnel.
10. Encourage thorough review by PADOT of all proposed new access points along State-owned collector or arterial highways (especially PA Routes 44, 45, 54, 254, 642) to avoid creating potentially unsafe intersections and situations. Review development plans from this standpoint as well to ensure coordination with individual Township highway plans and projects.
11. Coordinate, to the extent possible, all public utility installation projects with existing or proposed road or highway improvement projects.
12. Encourage a variety of employment opportunities for Planning Area residents while preserving a healthful and pleasant environment.
13. Work with existing economic development agencies (including the Danville Area Chamber of Commerce and SEDA-COG) to explore the possibilities for new economic development in appropriate locations throughout the Planning Area.

14. Arrange for a local historian to provide a review of historical significance and impact for developments proposed in areas of the Planning Area which have been identified as potentially historic.

15. Maximize the effectiveness and extent of limited State, Federal or regional grants or resources which may be available by coordinating major projects with adjacent municipalities or regional authorities, when possible.

16. Work closely with the County Planning Commission staff and County Conservation District personnel to review and evaluate all subdivision plans proposed in the Planning Area. Streamline the process of evaluating plans by developing a checklist.

SHORT-TERM IMPLEMENTATION STRATEGIES

With Budget Impact

1. Consider issuing a press release and/or sending out a newsletter to Planning Area residents regarding adoption of the Comprehensive Plan.

2. Develop a Joint Municipal Zoning Ordinance for the Planning Area that considers the character of the various segments of the Planning Area Townships; gives consideration to the capacity of the area's natural resources to accommodate new development; and discourages utilization of environmentally-sensitive areas and areas with prime farmland soils.

3. Hire a "Circuit Rider" Permit Officer to administer and enforce the Joint Municipal Zoning Ordinance in an equitable, consistent fashion throughout the Planning Area and issue Building/Zoning Permits.

4. Consider issuing a press release and/or sending out a newsletter to Planning Area residents regarding the development of the Joint Municipal Zoning Regulations.

5. Identify existing drainage or run-off problems in the Township and develop a strategy and schedule to correct them.

6. Pursue State and Federal grant assistance programs to assist the Planning Area Townships in providing cost-effective and financially-feasible public facilities and services.

7. Require municipal Driveway Permits for the construction of all new driveways onto Township roads or alleys. Utilize the Driveway Design Guidelines contained in the Montour County Subdivision and Land Development Ordinance (until such standards can be incorporated into local

land use control regulations) as a means of assuring the safety of such installations.

8. Encourage participation in and budget dollars for attendance at State or locally-sponsored training seminars or workshops for Joint Municipal Planning Commission members.

LONG-TERM IMPLEMENTATION STRATEGIES

With Limited Budget Impact

1. Consider the need to adopt nuisance ordinances to regulate various nuisance occurrences.

2. Protect known groundwater recharge areas by restricting the type and intensity of development in these areas. Require developers to undertake hydro geologic studies where there are known water quantity problems, or in an attempt to avoid adverse impacts on the water supply of adjoining properties.

3. Require storm water management controls to be incorporated into the design of all new subdivisions. Require developers to submit the necessary documentation and calculations to show that their proposed controls will be adequate and will not cause adverse impacts on adjoining properties.

4. Support the establishment of an emergency 911 identification and dispatching system for Montour County.

5. Support the Danville and Warrior Run Area School Districts in their efforts to provide quality education for district students and adequate school facilities. Emphasize the importance of academic achievement for students.

6. Support the many college and extension training and re-training courses offered by the two and four-year institutions in the area as a means of maintaining a skilled work force in the Planning Area.

7. Monitor State and County transportation policies as they relate to proposed or potential improvement projects in the vicinity of the Planning Area to coordinate State and Local planning efforts and to determine their possible impact on the municipality.

8. Formalize the on-going improvement/maintenance programs for all municipally-owned roads and bridges throughout the Planning Area,

identifying by year those projects intended for completion. Consider the development of a capital improvements program in each Township to assist with budgeting for the purchase of road maintenance equipment and identification of potential funding sources.

9. Periodically review all existing road directional and speed limit signs and determine their adequacy and consistency. Adjust or increase where appropriate.

10. Investigate the availability of housing assistance funds or programs to assist in the rehabilitation of homes, particularly those owned by residents of low or moderate income, as a means of protecting the existing housing stock and maintaining exterior structure appearances.

11. Consider organization of a Historic Committee made up of interested Planning Area residents to identify historically significant structures and sites and determine the benefit of encouraging their registration on State and/or National Historic Registers as a means of preserving the Area's heritage for future generations.

12. Maintain the close working-relationship and idea-exchange forum made possible by the creations of the Montour County Council of Governments. Encourage participation by all County municipalities.

13. Maintain a close working relationship with County Planning Commission staff in order to stay abreast of pending programs and land use issues that may impact the Planning Area.

14. Periodically review the Development Goals, Objectives and Recommendations of this Plan to determine if updates or adjustments are needed. Where unanticipated changes or development occur, renew the planning process and prepare an amendment to this document.

LONG-TERM IMPEMENTATION STRATEGIES

With Budget Impact

1. Develop a Joint Municipal Subdivision and Land Development Ordinance for administration and enforcement in the Planning Area Townships. Such regulations should encourage only well-planned developments to locate in the Planning Area by requiring developers to adequately address and provide for sewage disposal and water supply needs, transportation and storm water management facilities, and appropriate utility installations for their developments.

2. Assign responsibility for administration and enforcement of the Joint Municipal Subdivision and Land Development Ordinance to the Circuit Rider Permit Officer. Increase the hours and salary of the position commensurate with the additional assigned duties.
3. Identify wildlife habitat areas in the Planning Area Townships in order to protect these natural resources.
4. Consider the need to institute a septage management program for unsewered areas of the Planning Area experiencing sub-surface sewage system malfunctions in order to ensure long-term soils viability.
5. Maintain current, realistic plans for handling and disposing of solid waste generated within each municipality by residents, businesses and industries, including policies promoting recycling efforts and arrangements for periodic collection and disposal of "white goods".
6. Endeavor to provide for community facilities and services and public utilities in an orderly and timely fashion by establishing an annual capital improvements program reflecting the need for municipal services or public facility projects in the municipal budget of each Township.
7. Evaluate the current level of police protection provided for the Planning Area Townships by the PA State Police. If determined inappropriate, explore the costs and benefits of establishing a regional, municipal police department in conjunction with other area communities.
8. Maintain the current level of fire and ambulance protection provided by the various local Volunteer Fire Companies, and the Danville and Turbotville Ambulance Companies.
9. Coordinate planning for flood emergencies, hazardous materials emergencies and medical emergencies with neighboring municipalities, local and County Emergency Management personnel and applicable service providers. Establish appropriate procedures for response and mitigation of potential disaster situations.
10. Determine the interest in and feasibility of providing for additional recreational activities within the Planning Area to increase the variety of recreational opportunities available for residents. Examine the possibilities of developing such facilities on a multi-municipal basis to maximize investments. If sufficient interest is generated, develop a plan and/or establish a schedule to address the identified activities.

11. Investigate the benefits of regionalizing other municipal services, including public utility installation, sewage permit issuance, cultural program presentations, and transportation or highway-related projects.

12. Consider the adoption of a Building/Property Maintenance Code to establish minimum standards for maintenance of properties and provisions for the removal of unsafe or dilapidated structures throughout the Planning Area Townships.

13. Consider the adoption of a building code to regulate the safety of new construction, including fire safety for multi-story and other multi-family dwelling structures.

14. Consider the value of preparing a periodic newsletter for Planning Area residents. Seek donations from area businesses for printing and mailing of the newsletter.

C. PROJECT FUNDING OPTIONS

There are numerous ways or methods to finance projects that have been identified as viable in a capital improvements program or other study. Several are listed below with a brief definition and an explanation of their purpose.

1. Current Revenue

This is the “pay-as-you-go” approach to financing projects from current revenues, i.e. general taxation, fees, service charges, special funds or special assessments. No borrowing is involved.

2. Reserve Funds

This type of improvement financing is reserved in advance and funds are accumulated for capital construction. Funds come from surplus or are earmarked current revenues. When sufficient funding is accumulated, project construction is begun or equipment purchase is made.

3. General Obligation Bonds

General obligation bonds are bonds sold to finance permanent improvements such as schools, hospitals and similar facilities. Such financing can often require voter approval though since principal and interest on the bonds are paid out of tax revenues.

4. Revenue Bonds

Revenue bonds are bonds sold to produce revenue for specific projects. These bonds are financed by service fees or charges associated with the capital project. Water and sewer systems are many times financed with this type of bond. The interest rate on revenue bonds is typically higher than the interest rate for general obligation bonds.

5. Lease-Purchase

With this type of arrangement, a private company, authority or individual builds the public works project to the specifications of the local government and then leases the facility to that government. At the end of the lease, the original cost of the project plus interest has been paid and the local government receives ownership.

6. Authorities and Special Districts

Authorities or special districts are generally established by a municipality where a facility or project will serve a specific area. The project may be financed by revenue bonds, user charges, or a special tax may be applied in the district.

7. Special Assessments

This method of financing provides a more equitable method of funding public works projects that benefit particular properties. In this case, property owners benefiting from a project pay a special assessment to finance the project or facility.

8. State and Federal Grants and/or Loans

Various State and Federal grants and/or loans are sometimes available to finance capital projects and programs, including Community Development Block Grants through the Department of Community Affairs, PennVEST, or Farmer's Home Administration funds. Grants are generally competitive and municipalities usually need to meet specific criteria in order to be eligible for the government-sponsored monies. In many cases, grants also require a local match or share, although cases, grants also require a local match or share, although the percentage varies between programs.

9. Tax Increment Financing

This type of funding is generally associated with large scale redevelopment in urban and suburban areas. The increased tax base created by the redevelopment project is used to retire bonds which were sold to finance the

project. Increased tax base created by the redevelopment project is used to retire bonds which were sold to finance the project. Increased tax revenues in the project area are distributed normally after the project costs are retired.

RESOLUTION

WHEREAS, the Boards of Supervisors of Anthony, Derry, Liberty, Limestone and West Hemlock Townships, Montour County, PA, possess the legal authority under Articles III and XI of the PA Municipalities Planning Code, Act 247 of 1968, as amended by Act 170 of 1988, to adopt a Joint Municipal Comprehensive Plan; and

WHEREAS, the Boards of Supervisors of Anthony, Derry, Liberty, Limestone, and West Hemlock Townships, Montour County, PA, authorized the expenditure of municipal funds and selected a consultant to assist the Northern Montour Regional Planning Commission in the development of such a Plan; and

WHEREAS, in _____ 1993 the Northern Montour Regional Planning Commission and planning consultant, completed the development of the “Joint Municipal Comprehensive Plan for Anthony, Derry, Liberty, Limestone and West Hemlock Townships – 1993” (Second Draft); and

WHEREAS, the Northern Montour Regional Planning Commission held a Public Meeting pursuant to public notice on _____, 1993 to receive public comment on the proposed Plan; and

WHEREAS, the Board of Supervisors of Anthony Township held a Public Hearing, pursuant to public notice, on _____, 1994 regarding the proposed Joint Municipal Comprehensive Plan;

NOW, THEREFORE BE IT RESOLVED, that the Board of Supervisors of Anthony Township, Montour County does hereby adopt the Second Draft of the “Joint Municipal Comprehensive Plan for Anthony, Derry, Liberty, Limestone and West Hemlock Townships – 1993”, in its entirety.

IN WITNESS THEREOF, we have hereunto set our hands and seals this _____ day of _____, 1994.

ANTHONY TOWNSHIP BOARD OF SUPERVISORS

Chairman Jeffrey S. Bieber

Dio M. Shetler

Willard Kirkner

ATTEST:

Secretary, Anthony Township
William E. Stellfox

APPENDIX

Appendix B

TABLE 5. -- YIELDS PER ACRE OF CROPS AND PASTURE

(Yields are those that can be expected under a high level of management. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil.)

Soil name and map symbol	Corn	Corn silage	Oats	Wheat	Alfalfa hay	Grass-legume hay	Pasture
	<u>Bu</u>	<u>Ton</u>	<u>Bu</u>	<u>Bu</u>	<u>Ton</u>	<u>Ton</u>	<u>AUM*</u>
AbB----- Albrights	100	20	70	40	3.5	3.0	6.5
AnA----- Allenwood	135	27	80	50	5.5	3.5	10.5
AoB----- Allenwood and Washington	140	28	80	50	5.5	4.0	9.5
AoC----- Allenwood and Washington	130	26	75	45	5.0	4.0	9.0
ArA----- Alvira	95	19	60	---	---	3.0	6.0
ArB----- Alvira	95	19	60	---	---	3.0	6.0
ArC----- Alvira	90	18	55	---	---	3.0	6.0
AsB----- Alvira	---	---	---	---	---	---	---
Bc, Bd----- Basher	120	24	80	45	4.5	3.5	8.5
BeB----- Bedington	130	26	75	50	5.0	3.5	9.5
BeC----- Bedington	120	24	70	45	4.5	3.5	8.5
BeD----- Bedington	105	21	60	40	4.0	3.0	7.5
BkB----- Berks	80	16	60	35	3.5	3.0	6.5
BkC----- Berks	75	15	55	35	3.0	2.5	5.5
BkD----- Berks	70	14	50	30	3.0	2.5	5.5
BuB----- Buchanan	100	20	65	40	3.5	3.0	6.5
BuC----- Buchanan	90	18	60	35	3.5	3.0	6.0
BxB----- Buchanan	---	---	---	---	---	---	---
BxD----- Buchanan	---	---	---	---	---	---	---
CaB----- Calvin-Klinesville	75	15	60	30	3.0	2.5	6.0
CaC----- Calvin-Klinesville	70	14	40	30	3.0	2.5	5.5

See footnotes at end of table.

TABLE 5. -- YIELDS PER ACRE OF CROPS AND PASTURE--Continued

Soil name and map symbol	Corn	Corn silage	Oats	Wheat	Alfalfa hay	Grass-legume hay	Pasture
	Bu	Ton	Bu	Bu	Ton	Ton	AUM*
CaD----- Calvin-Klinesville	65	13	40	25	2.5	2.5	5.0
DeD----- Dekalb	---	---	---	---	---	---	---
DeF----- Dekalb	---	---	---	---	---	---	---
EdB----- Edom	130	26	70	40	4.0	3.0	7.5
EdC----- Edom	120	24	65	35	3.5	3.0	6.5
EdD----- Edom	105	21	60	35	3.0	2.5	5.5
EsB----- Elliber	110	22	70	40	4.0	3.0	4.5
EsC----- Elliber	105	21	65	40	4.0	3.0	4.5
EsD----- Elliber	100	20	65	40	3.5	2.5	4.0
EtB----- Elliber	100	20	65	35	3.5	2.5	4.0
EtC----- Elliber	95	19	60	35	3.5	2.5	4.0
EtD----- Elliber	---	---	---	---	---	---	3.5
EtF----- Elliber	---	---	---	---	---	---	---
EvB----- Evendale	85	17	65	35	---	3.0	5.5
HaB----- Hagerstown	135	27	80	50	5.5	3.5	10.5
HaC----- Hagerstown	125	25	75	45	5.0	3.5	9.0
HaD----- Hagerstown	110	22	65	35	4.0	3.0	8.0
HtB----- Hartleton	100	20	65	35	3.5	3.0	6.5
HtC----- Hartleton	95	19	60	35	3.0	2.5	6.0
HtD----- Hartleton	85	17	55	30	3.0	2.0	6.0
HuB, HuD----- Hazleton and Clymer	---	---	---	---	---	---	---
Hv----- Holly	70	14	70	---	---	3.5	4.0
Hy----- Holly	---	---	---	---	---	---	---

See footnotes at end of table.

TABLE 5. -- YIELDS PER ACRE OF CROPS AND PASTURE--Continued

Soil name and map symbol	Corn	Corn silage	Oats	Wheat	Alfalfa hay	Grass-legume hay	Pasture
	Bu	Ton	Bu	Bu	Ton	Ton	AUM*
H _z ----- Holly	100	20	70	---	---	3.5	---
K _{mB} ----- Kreamer	90	18	65	40	3.5	3.0	6.5
K _{mC} ----- Kreamer	80	16	60	35	3.5	3.0	6.5
L _{aB} ----- Laidig	100	20	70	40	4.0	3.0	4.5
L _{aC} ----- Ladig	95	19	65	35	4.0	3.0	4.5
L _{dD} ----- Laidig and Meckesville	---	---	---	---	---	---	---
L _{dF} ----- Laidig and Meckesville	---	---	---	---	---	---	---
L _{nB} ----- Leck Kill	125	25	80	50	4.5	3.0	5.0
L _{nC} ----- Leck Kill	120	24	80	50	4.0	3.0	4.5
L _{nD} ----- Leck Kill	105	21	70	45	4.0	2.5	4.0
L _w ----- Linden	120	24	80	45	4.5	3.5	9.0
M _{kB} ----- Meckesville	100	20	70	40	4.0	4.0	7.5
M _{kC} ----- Meckesville	95	19	65	35	3.5	4.0	7.5
M _{oA} ----- Monongahela	110	22	65	40	3.5	3.0	4.5
M _{oB} ----- Monongahela	110	22	65	40	3.5	3.0	4.5
O _{pB} ----- Opequon	85	17	60	25	3.5	2.5	4.5
O _{pD} ----- Opequon	75	15	55	---	3.0	2.0	4.0
O _{pE} ----- Opequon	---	---	---	---	---	---	---
P _a ** Pits							
Q _u ** Quarries							
S _{hA} ----- Shelmadine	85	17	60	---	---	2.5	5.0
S _{hB} ----- Shelmadine	85	17	60	---	---	2.5	5.0
U _g ----- Udfluvents and Fluvaquents	---	---	---	---	---	---	---

See footnotes at end of table.

TABLE 5. -- YIELDS PER ACRE OF CROPS AND PASTURE--Continued

Soil name and map symbol	Corn	Corn silage	Oats	Wheat	Alfalfa hay	Grass-legume hay	Pasture
	<u>Bu</u>	<u>Ton</u>	<u>Bu</u>	<u>Bu</u>	<u>Ton</u>	<u>Ton</u>	<u>AUM*</u>
UnB----- Unadilla	105	21	75	45	5.0	3.5	6.5
UnC----- Unadilla	100	20	75	45	4.5	3.5	6.5
UnD----- Unadilla	95	19	70	40	4.0	3.0	6.0
Ur**. Urban Land							
WaB----- Washington	125	25	70	40	4.0	3.0	6.5
WbA----- Watson	100	20	70	40	3.5	3.0	6.5
WbB----- Watson	100	20	70	40	3.5	3.0	6.5
WbC----- Watson	90	18	65	40	3.5	3.0	6.5
WeB----- Weikert	60	12	50	25	2.0	2.0	4.0
WeC----- Weikert	55	11	45	20	2.0	2.0	4.0
WeD----- Weikert	---	---	---	---	---	---	---
WkE----- Weikert and Klinesville	---	---	---	---	---	---	---
WsA----- Wheeling	125	25	75	45	4.5	3.5	7.0
WsB----- Wheeling	125	25	75	45	4.5	3.5	7.0
WyA, WyB----- Wyoming	90	18	75	45	4.0	3.0	6.0

* Animal-unit-month: The amount of forage or feed required to feed one animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days.

** See description of the map unit for composition and behavior characteristics of the map unit.

APPENDIX C

PLANNING AREA BUSINESSES & INDUSTRIES

APPENDIX C

Planning Area Townships Businesses and Industries

January 1993

Anthony Township

Myron Watson Used Cars and Body Shop
B&W Upholstery
Hill County Gallery (HO) *
Betz Custom Meat Market
Auto Junk Yard (School House Lane, Exchange)
Gardner's Body Shop
Jack's Custom-made Cabinets (HO)
Jack's Hi Si Beagles (HO)
Barb & Sally's Fabrics & Crafts
Bar (PA Route 54)
Agri-Welding Service
G. Riccioni Jr. & Son Power Vacuuming
Sharp-All Shop (HO)
Auto Junk Yard (T-352)
Auto Junk Yard (SR 1008)

Derry Township

Eastern Milk Producers Dairy Store
Village Inn Restaurant
Burkholder's Produce (seasonal)
Washingtonville Garage
Bryfogles Greenhouses
Lakeville Greenhouses
Crop Production Services
Buggy Shop & Quilts and Crafts (HO)
Kelly Tires
Derry Beverage
Bartlett Garage and Junk Cars
Hillside Furniture (HO)
Play & Learn Day Care (HO)
Hanover Model Homes
Steve's Pro-Street Paint Shop (HO)
Aurand Brothers Milk Hauling
Veve & Chris' Deli

Hoffner's Garage

Liberty Township

Oak Grove Shop (HO)
Appleman Plumbing and Heating (HO)
Trucking Business
R & H Business
Wieand Brothers Well Drilling, Inc.
George Farms Custom Butchering (HO)
George's Liberty Gardens

Limestone Township

Hoffman's Machine Shop
Dye's Gas and Oil
Lycoming Silica Sand – Milton Plant (Industrial)
Superior Road Service/Trucking (PA Route 254)
Agricultural Resources, Inc. - Warehouse #2
Royer's Lime Quarries (Industrial)
Ed Cole's Carpet/Ceramic Tile
Herr Milling Company
Strick Trucking (Industrial)
L. & H. Auto Body
Limestone Mobile Concrete (Industrial)
Wendy Ziegler's Beauty Salon (HO)
Aden Martin's Blacksmith Shop (HO)
Riding Stable (PA Route 254)

West Hemlock Township

Kitchen's Garage (HO)

* (HO) – Home Occupation

Source: Field Survey conducted by Landplan, Inc., December 1992 and January 1993.

APPENDIX D

Planning Area Townships

Churches and Schools

APPENDIX D

Planning Area Townships Churches and Schools

Anthony Township

Derry Mennonite Church & Cemetery
NE corner of PA Route 587 and SR 1006

Fairview Church of the Nazarene
SE Corner of SR 1003 and Fairview Church Road

St. James Episcopal Church & Cemetery
Village of Exchange

White Hall Baptist Church & Cemetery
Village of White Hall

Apostolic Faith Church
Anthony Township Community Building, Village of Exchange

Beaver Run Amish School
SR 1003

Derry Township

Trinity United Church of Christ & Cemetery
Village of Strawberry Ridge

Washingtonville Lutheran Church & Cemetery
PA Route 414, just east of Washingtonville

Danville Practical Nursing Campus
Borough of Washingtonville

Amish School
Village of Strawberry Ridge (?)

Liberty Township

Trinity Oak Grove Lutheran Church & Cemetery
SE corner of Oak Grove and Starner Roads

Presbyterian Church of Mooresburg & Cemetery
Village of Mooresburg

One Room School House Museum
Village of Mooresburg

Limestone Township

Beaver Run Mennonite Church & Cemetery
SE corner of SR 4001 and Beaver Run Road

Amish School
Schuyler Road

West Hemlock Township

Sheep's Bible Church (St. John's Church)
NE corner of PA Route 642 and Billhime Road

St. Peter's Lutheran Church & Cemetery
Village of Columbia Hill

Long's Church & Cemetery (now West Hemlock Township Community
Hall)
SR 2007, south of Village of Columbia Hill

Source: Field Survey conducted by Landplan, Inc., December 1992 and
January 1993.

APPENDIX E
ROADWAY CONDITION RATING FORM

APPENDIX E
Roadway Condition Rating Form

Road Name _____; Route #

Pavement/Surface _____ Type
_____ (Concrete, Bituminous, Gravel/Dirt)

Pavement _____ Condition

Pavement Condition Ratings

Good: Pavement is smooth and free of pot holes.

Fair: Surface is smooth with scattered pot holes.

Poor: Surface is rough or non-existent or has numerous pot holes, breaks, etc.

APPENDIX F

HOUSING CONDITION RATING FORM

APPENDIX F

Housing Condition Rating Form

I. Location _____ of _____ Housing _____ Unit

(Street Address)

II. Type of Dwelling
a. Single Family Detached _____
b. Multi-Family
Townhouse _____; # of Units

Apartments _____; # of Units

c. Mobile Home _____

III. Status _____ of _____ Dwelling

(Occupied, Vacant, Year-Round, Seasonal)

Housing Condition Ratings

Excellent: House is structurally sound and well maintained. The overall appearance of the structure is good. Surrounding yard or grounds are free of trash and clutter.

Good: Home is structurally sound, but is in need of minor exterior maintenance. Surrounding grounds or yards are generally free of trash or clutter.

Poor: Building is structurally sound, but is in need of substantial exterior repairs. Continued deferred maintenance could lead to dilapidated condition. Surrounding grounds may also be trash-strewn or poorly maintained.

Deteriorating/Dilapidated: Home is structurally unsound. Building has leaning walls, sagging roof or porches, damaged foundation, or is generally rund-down or neglected. Surrounding grounds receive little or no maintenance and may be quite cluttered or strew with trash or other materials.